

MARCH 27, 1948

YOUNGSTOWN

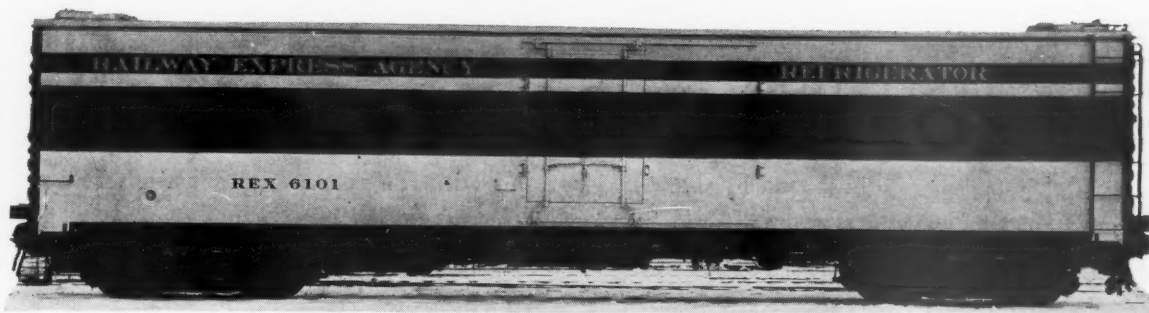
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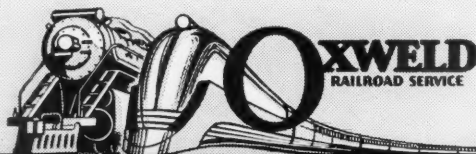
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RAILWAY AGE

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WEEK AT A GLANCE

POLISHING OFF THE RAILROADS: The gentleman from Texas who now heads the Department of Justice recently made a speech. His remarks appear in full in this issue (page 42) as no railroad man should be denied the opportunity to benefit from this remarkable appraisal of the railroads—and some other industries. The automobile manufacturers have the key to progress, says Mr. Clark, for example, and the railroads ought to get the lead out of their heels and go and do likewise. A railroad hardly ever gets a new idea, we are told, and when it does grudgingly put cupolas on cabooses it takes forever to adopt a new model with bay-windows instead. Railroads keep their new ideas hidden from their competitors, but Mr. Ford, when he thinks up something new, immediately rings up General Motors to tell them all about it. Another measurement of railroad backwardness is statistical—there were 2,256 times as many new automobiles built in 1947 as there were new passenger-train cars. This proves to the attorney general that the railroads still are in the horse-and-buggy era.

LIGHT METALS IN CARS: Two of Reynolds Metals' railway specialists recently reviewed the record of aluminum as a material for freight car construction, and their report forms the basis of one of our illustrated articles (page 38). Detailed tabulations indicate the saving in weight (and consequent increase in pay-load capacity) attributable to the use of this structural metal, and its durability in service is analyzed.

HIGH-PRESSURE BOILER: Taking advantage of experience in stationary power plants, the Steam Locomotive Research Institute has developed a high-pressure locomotive boiler design with a fire-tube barrel and a firebox with closely spaced water-tube walls. One of our illustrated articles (page 48) outlines the arrangement.

BILL FOR BENEFITS: The 1947 fiscal-year operations of the Railroad Retirement Board are reported herein (page 49). Even though it paid out \$220 million, even though many more men who have been on a railroad payroll are eligible for "benefits" since the Crosser Law became effective, collections still exceed disbursements, and the board considers itself actuarially solvent. How it could well be otherwise just now, comparing the tax rate the railroads pay under this law to that paid by other industries under the general social security law, is a question the board did not answer.

HOW MUCH PREPAREDNESS?: In World War II the railroads proved themselves ready to handle a volume of traffic far above previous experience—and far beyond what their prewar detractors expected to be the breaking point. But World War III—if it should come—quite conceivably could impose upon American railroads a burden they have not had to cope with since 1865, namely enemy action,

direct or by sabotage. To be ready for such an eventuality the railroads need more than just the capacity to handle all the traffic another war would create, our leading editorial remarks—they need a reserve in equipment, yards, enginehouses, shops, terminals, alternate routes and other essential facilities, so important passenger and freight operations could be continued despite destruction or impairment of vital parts of the railroad system.

BIGGER BUNGHOLE: The brothers have figured out what to do about the embarrassingly large balance that has accumulated in the Treasury—almost \$1 billion—from railroad contributions under the Unemployment Insurance Act, and Mr. Crosser has introduced a bill to make their idea a law. The way to keep that balance within reasonable limits is not to reduce the tax rate the railroads now pay, say the union leaders. That procedure would make more funds available to the railroads for other purposes, of course, including providing more employment for railroad men, but that doesn't interest these "labor" statesmen. They want to leave the tax rate up in the clouds and increase the payments to the beneficiaries. As our news pages report, the railroads are urging a reduction in the tax rate, with a sliding-scale arrangement to maintain a substantial, but reasonable, reserve at all times.

BETWEEN THE BATTLE LINES: Railroads that use coal for locomotive fuel find themselves caught in the middle—as usual—in the latest conflict between the miners' union's boss and the coal producers. Government orders have compelled a 25 per cent cut in passenger-train operations depending on coal-burning power, with a similar cut in freight operations to apply March 31 (unless, of course, the miners meanwhile become willing to work again). All railroads, obviously, will experience diminished earnings from the loss of coal traffic and the general industrial slow-down resulting from the mine strike. The parties to the dispute, and the people in Washington who are now trying to lock the stable door after legislating it so invitingly open for Mr. Lewis, may be interested in two items in the news this week, viz.—(1) the Pennsylvania expects to have all principal passenger trains in non-electrified territory Dieselized by summer; (2) President Ashby of the coal-rich Union Pacific fears that road may have to extend its permanent Dieselization to its eastern lines.

TRAFFIC TRAINING: Significant success is reported (page 45) for the New Haven's recently inaugurated traffic department training program. That success is attributed largely to active management sponsorship and support and to procedures based primarily on what the participants want to know, rather than what the instructors want to teach. Courses were set up for supervisory and non-supervisory groups, for sales management personnel and sales representatives.



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PRESCRIPTION FOR RAILROAD PREPAREDNESS

It is unfortunate but urgent that the railroads must once more consider the possibility, at least, that they will have war problems to solve. This time—if there is a conflict—the potentialities to be weighed will have to embrace more territory than, merely, the supplying of an army overseas. It would be tempting fate not to be prepared, also, to continue operations with at least some direct interference by the enemy, by sabotage if not by open attack.

That a *super*-abundance of line and rolling facilities is the greatest insurance against disastrous collapse of railroad transportation from enemy action in time of war is the most significant single conclusion to be gained from the experience of Germany during World War II. The story appears in the detailed report, "The Effects of Strategic Bombing on German Transportation," issued early in 1947 by the United States Strategic Bombing Survey—in cold figures and summaries of interviews with German railroad officers.

Briefly, it is this: By most standards, the German railroad system was excellent at the beginning of the war and was marked by a surplus of line and terminal facilities and an abundance of serviceable rolling stock. It is true that the German government neglected to "give adequate consideration to transport problems" and thereby "prevented the *Reichsbahn* [German National Railways] from undertaking all the new installations

needed to cope with industrial dispersion or to strengthen the plant against possible effects of air attack." The minister of transport regarded the railroad system as "crisis proof." But apart from this failure to equip the system to withstand military damage specifically, the German railroads were fat with facilities, which enabled them to withstand, and recuperate from, bombing and "strafting" attacks to an extent which astonished the survey's observers. The early sporadic raids over the country had almost no effect on the ability of the system to carry its load. It was only after the start of concentrated attacks in September, 1944, that the railroads lost progressively their regenerative powers.

Air Raids Ineffective

As American railroaders found almost everywhere overseas, the German railroads lacked, in many respects, the flexibility of our own carriers. "A well-defined schedule was established at each yard for classification of cars; any disturbance in this methodical operation was a distinct disadvantage."

Despite this important fact, air raids on German yards were not nearly so effective in disrupting transport as had been expected. First, in many areas, the system had so many alternate routes and such an extent of yard capacity that

disruption "could not economically be established by yard attacks."

The investigators found that the capacity of most yards exceeded the actual peak number of cars handled by at least 30 per cent. Second, even in areas less well supplied with yards, by reason of ample repair forces and stocks, "recuperative powers were high." Yards were seldom tied up for more than four days after the first intensive attack, and were often back to 80 per cent of pre-raid capacity in from two to three weeks. "Hamm yard, for example, largest in Germany, was hit with 80 tons of bombs on March 23, 1944, 1,500 tons on April 22, and 148 tons on May 31. But, by late June, the yard was putting 3,700 cars a day over the eastbound hump and 3,000 to 3,500 over the Westbound, or 90 per cent normal capacity."

Mechanization Would Have Helped

The system's ability to restore facilities quickly stemmed chiefly from the provision of limitless labor forces by the authorities, ample repair trains, and numerous alternate routes and tracks. The system's weakness lay, not in quantity of facilities, but in its failure to mechanize them. "The great handicap of the Germans in their race to repair transport facilities faster than we could damage them was a lack of heavy earth-moving equipment. . . . More adequate mechanical equipment for permanent-way repair and more ample and dispersed stocks of permanent-way material would have facilitated the repair effort."

Superabundance of facilities of another sort also proved invaluable in keeping transport moving. As the report notes, practically all large German terminals were equipped with two—sometimes three—enginehouses. As a result, servicing and light repairs were merely shifted to houses unaffected by bombing. It was only through simultaneous destruction of all such facilities at a given point that demoralization of this phase of operation was brought about. "Such effect was found in but few of the targets visited."

In rolling stock, as well as fixed properties, the German system had a comfortable surplus which postponed appreciably the point of transport collapse. Comments the report: "It was this surplus of rolling stock and locomotives that prevented the rising losses due to strafing from becoming a serious . . . threat to the German economy and ability to wage war. Only a well-integrated system, with a large cushion of reserve stock, could withstand an attrition rate such as the one imposed upon *Reichsbahn* by Allied strafing."

From the foregoing, it is evident that the railroads of this continent have a lot of ground to cover before it could be said that they are well prepared for direct involvement in warfare.

A GOOD JOB — BUT AN INCOMPLETE ONE

The American Railway Engineering Association again distinguished itself during its recent annual meeting in Chicago, and has set its sights toward still greater achievements in the year ahead. This was clearly evident to everyone who attended the meeting, and must have been equally so to everyone who read the detailed report in the March 20, A.R.E.A. Convention issue of *Railway Age*. In every way—attendance, program, enthusiasm and accomplishments—it was a great convention. Equally stimulating, educational and successful was the large concurrent exhibit, by the National Railway Appliances Association, of materials, equipment and appliances used by the construction and maintenance forces.

With 21 A.R.E.A. committees making studies and reports on nearly 100 subjects, it would be difficult to single out any one or more of the lines of investigation for special comment or attention. Outstanding however, is the upward surge of research in the activities of the association. To most of the railways, this is, or should be, the most significant development in A.R.E.A. activities.

The amount of money specifically earmarked by the railroads for engineering research is, in itself, no accurate measure either of the effort being expended by the construction and maintenance forces in this class of work, or of their accomplishments, because there is no complete record of the large additional sums spent annually by the railways in their own shops and laboratories, and in the field, for scientific studies and investigations. That research in construction and maintenance activities is growing, and is expressing itself in increasing measure through the Association of American Railroads and the American Railway Engineering Association, is unmistakably clear in the increased annual appropriations of funds for this purpose by the A.A.R.—to be administered largely under the direction of the A.R.E.A. From sums less than \$80,000 a year prior to 1938, these appropriations had grown progressively to \$234,428 in 1947, with a further increase to \$291,840 for 1948. These, of course, do not include the large annual appropriations by the A.A.R. for mechanical department research.

The A.R.E.A., acting as the Construction and Maintenance section of the Engineering division of the A.A.R., is ready, willing and capable to undertake the job as relating to the fixed properties. The year ahead, the fiftieth year in the history of the association, should be the most outstanding one in this regard. For the association, it may well be a year of celebration and commemoration—for it has a long list of achievements over the past half-

century in which to glory. But more important, it should be a year of great progress, and dedication to the still longer list of problems yet unsolved. To make that progress will require the intensive efforts of many minds, individually and collectively, both on and off the railways—backed up and supported by intensified field and laboratory research.

HARMFUL STATEMENTS

A glib-tongued speaker recently took the railroads to task because they had not made a certain improvement many years earlier than they did. Had he given the matter any serious study—and he is in a position to have done so—he would have recognized that conditions at the time he thought the improvement should have been made were such that there would not have been a sufficient demand to warrant the expense of developing the device. Certainly the possibilities for its use at that time were not such as to give the technician and promoter much encouragement in developing it.

Because an idea looks good on the drawing board, or because a laboratory experiment works out well where the conditions are fully controlled, does not necessarily mean that it can be used successfully on a large scale in general service. Experienced manufacturers with adequate research facilities and engineering ability recognize this. For instance, the General Electric gas turbine, designed for locomotive use and featured in the *Railway Age* of March 20, is the result of the most extensive and thorough scientific research by a company which has had long experience in building turbines. This particular gas turbine has been under test for several thousand hours. Yet General Electric Company representatives, when questioned during the demonstration, stated frankly that they could not establish a date at which it might be applied to a locomotive, and indicated that even then it would have to operate successfully in actual service for a considerable period before it could be approved as ready for service.

As one looks back over the years and recalls the hundreds upon hundreds of promising railroad devices — upon the development of which fortunes were spent—that have since landed in the scrap pile and been forgotten, the fact is emphasized that only time and practical service can iron out the difficulties retarding the successful operation of a new device. Unfortunately, men in high positions often succumb to the temptation of speaking more or less dogmatically about matters concerning which they have only a superficial

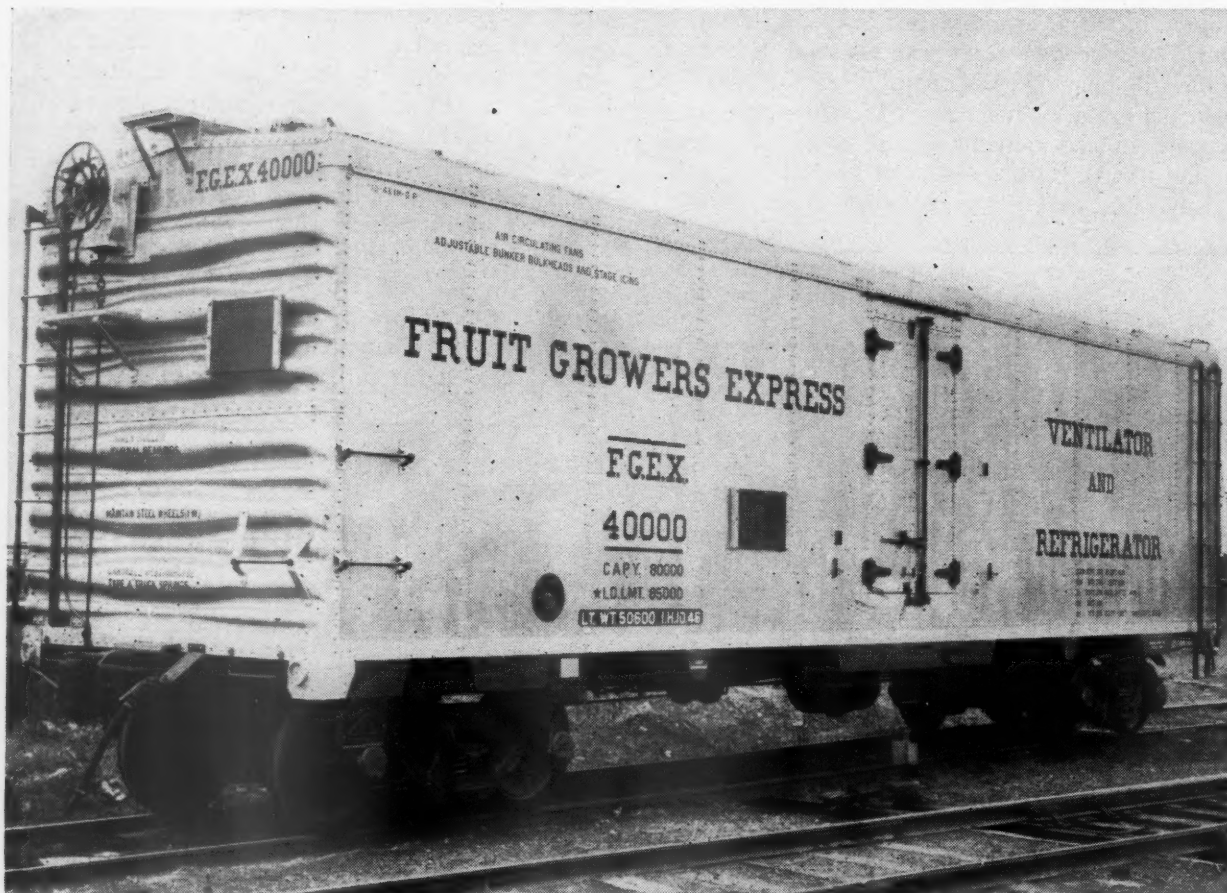
knowledge. At a time when the railroads, which acquitted themselves so well in the public interest during the war crisis, need sympathetic attention in order to rehabilitate their equipment and plant, it is a disservice and handicap to have the public mind inflamed and influenced adversely by men who speak with so little regard for facts, and make statements which seriously injure the railroads in the public opinion. Certainly it is in the interest of the welfare of our people and the nation that the railroads be given every reasonable opportunity to rehabilitate their plants, in order to be prepared for future emergencies.

WELDING SUPERVISION

Welding is a specialized art that must be handled by trained welding engineers, instructors and supervisors to improve welding standards and reduce welding costs. A builder of welding equipment recently said, "There are still quite a few large railroads that do not have even one supervisor specializing in welding. With all the welding that is being done today and the problems relating thereto, certainly even one man would have his hands full if the job were done properly. One large railroad in the east now has a general welding supervisor who is assisted by four associates covering various parts of the system. The officers of this road tell me that the cost of this supervision, which has now been established for about two years, has been paid for by the savings accruing from better organization and the study of welding practices."

In a recent discussion of seal-welded staybolts a boiler man of outstanding reputation said that he would not permit staybolts to be seal welded. Because seal welding has been applied to several hundred locomotives and test records have proved that this practice has solved the problem of cracked side sheets it is interesting to note that his reason for not accepting the method was not based on the merits of the practice but rather upon the restrictions placed on the welding operation. Seal welding is now permitted only in new applications and leaking staybolts can not be rewelded.

These restrictions are typical of the penalties that the railroads are paying for misapplications of welding in the past and a lack of confidence in the ability of railroad welding in general to meet existing safety standards. The very presence of these restrictions indicates that the railroads must improve their welding procedures if they are to take full advantage of the welding process. Procedures can only be improved by placing weld-under competent specialists.



Experimental aluminum-alloy refrigerator car weighing approximately five tons less than similar steel cars built by the Fruit Growers Express

ALUMINUM IN FREIGHT-CAR CONSTRUCTION

How much aluminum is used? What weight saving is attained? These questions are discussed in relation to 50-ton box and 50- and 70-ton hopper cars

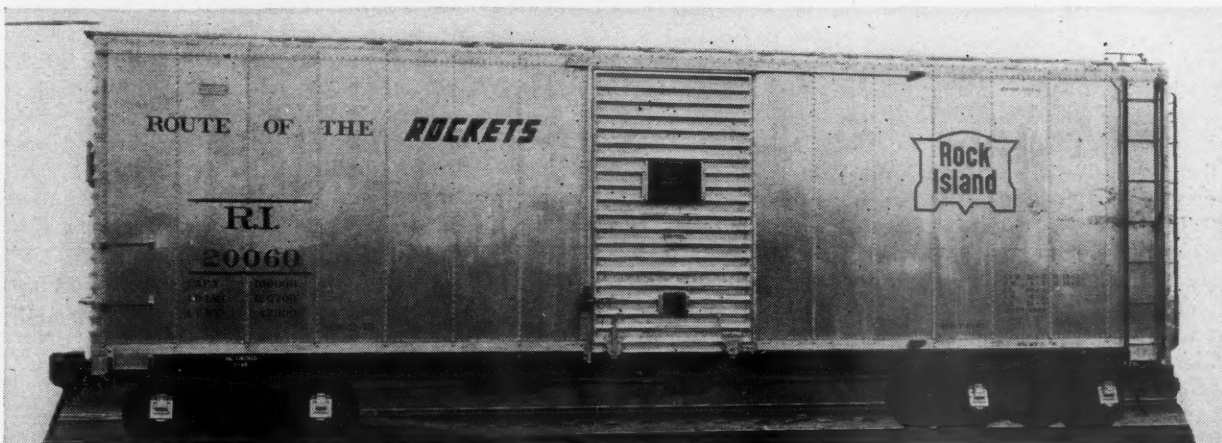
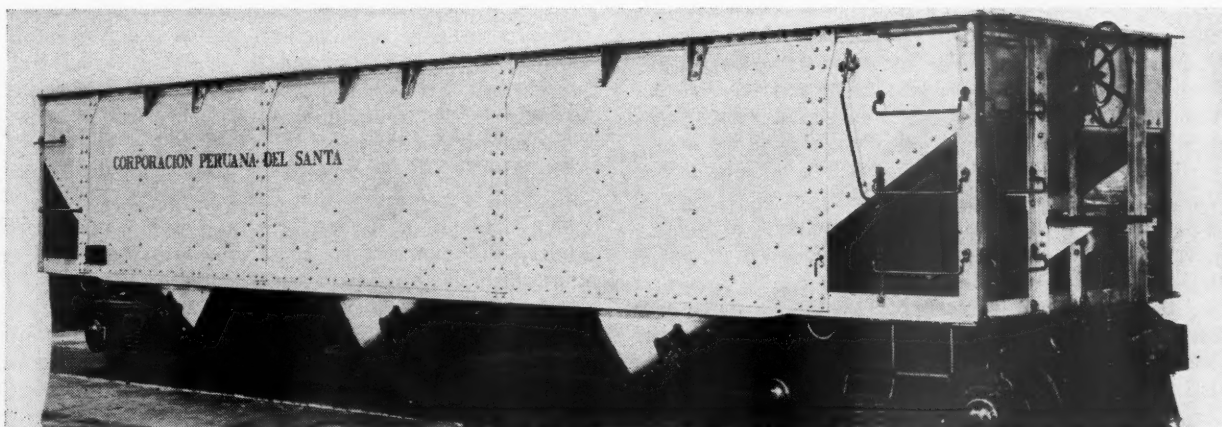
By R. B. BORUCK AND E. A. SIPP
Chief engineer and manager, respectively,
Reynolds Metals Company, Railway Division

Weight reduction in freight cars can be made either by the use of ferrous materials and sound, thorough engineering analysis, or by the adoption of light-weight non-ferrous materials, such as aluminum alloys or magnesium alloys. Limitations exist with the use of ferrous materials, such as weight-stress ratios, deflections, and safety factors. The material basis of all weight-reduction comparisons employed usually is open-hearth carbon steel, cast iron, and cast steel. The first attempt to reduce weight in freight cars was by

This article is an abstract of a paper sponsored by the Railroad Division and presented on December 4, 1947, at the annual meeting of the American Society of Mechanical Engineers at Atlantic City, N. J.

the use of the high-tensile steels and aluminum alloys.

The first all-aluminum freight cars—hopper cars—were built in 1931 by the Canton Car Company and were placed in service in the aluminum industry in the middle west. These cars were reported in the April, 1932, issue of *Railway Mechanical Engineer* as weighing 38,900 lb. at the rail. A weight reduction of 21,200 lb. was claimed and credited to the use of 12,500 lb. of aluminum in the car. This was a 70-ton car having a capacity of 2,475 cu. ft. as compared to the present standard A.A.R. 70-ton steel hopper car which has a capacity of 2,773 cu. ft. and weighs approximately 54,000 lb.



Top—Hopper car with aluminum body built by the Mt. Vernon Car Manufacturing Division, Pressed Steel Car Company. Load limit, 103,000 lb; light weight 23,400 lb. Below—A 50-ton aluminum-alloy box car equipped for head-end passenger-train service. Light weight, 42,900 lb.

These cars are now 16 years old, and the last inspection made by a representative of Reynolds Metals Company (February 29, 1944) showed no evidence of wear or tear from service. However, there was some evidence of electrolytic corrosion between dissimilar aluminum alloys, principally due to the use of steel rivets.

In 1934, the Baltimore & Ohio built one 50-ton aluminum hopper car weighing 27,200 lb. on the rail and using 10,711 lb. of aluminum alloys. The car had a capacity of 2,450 cu.ft., and a weight saving of 16,185 lb. was claimed as compared to the A.A.R. 50-ton steel hopper car which weighed approximately 43,000 lb. and had a capacity of 2,145 cu. ft. The additional 305 cu. ft. permitted an increased loading in the aluminum car of approximately eight tons per trip.

No major projects of freight-car construction were undertaken after the Canton and B. & O. cars were built until Reynolds Company, Railway Division, introduced 30 aluminum box cars in 1944-1945 with the cooperation of the Mt. Vernon Car Manufacturing Division of Pressed Steel Car Company and the Chicago, Rock Island & Pacific, the Alton, and the Minneapolis & St. Louis.

It was intentional that these cars, engineered by Reynolds and made to a design approved by the A.A.R. Car Construction Committee, were not designed for maximum weight reduction, but were rather of rugged

build to determine how they would stand up in freight service. Table I shows the weights of the cars divided into the component parts of the car.

The weight saving in these cars is based on comparative weights of car bodies, since trucks were of special designs and could also be used for steel cars. The aluminum car-body weight was 24,000 lb. compared to the A.A.R. standard car of similar size (45,000-15,600) which weighed 29,400 lb. There was therefore an actual weight saving of 5,400 lb. effected by the use of aluminum in the car body.

Lighter Sections Possible

These cars were thoroughly inspected during 1947, and from their condition it was concluded that future box cars could be made lighter by using lighter sections in the superstructure; accordingly such a car was designed by Reynolds. Table II shows the weight reduction in the Reynolds A.A.R.-approved design.

The weight reduction in the Reynolds new design is 7,880 lb., or approximately four tons. This, we believe, is the best weight reduction that can be made today; however, further reduction could be made if the ends could be economically manufactured of aluminum. It is to be noted that we have shown steel ends in our weight analysis. The reason for this is that it is uneconomical to manufacture aluminum ends with

the present available tools and dies. We have experimentally pressed single corrugations in a cold-tempered, high-strength, aluminum alloy and have determined the necessary tonnage required for such operation. We have also determined the exact die equipment necessary for this operation. The results of our experiment indicated both increased press capacity and new dies of such initial cost that, until such time as box cars are ordered in large quantities, it would be uneconomical to use aluminum ends.

For the present, we are recommending the use of steel ends, while other parts of the car body, such as roof, doors, etc., are to be made of aluminum with existing tools at no cost premium.

In designing an aluminum box car, more attention must be given to deflection of side-framing members due to bulging loads from grain loading. The vertical deflection is negligible. In the Reynolds design of box car, the side posts are so proportioned that the total moment of inertia is approximately three times the moment of inertia of posts in the A.A.R. design of low-alloy high strength steel car. It is evident that the stresses in aluminum side posts are less and that they have a greater factor of safety.

The Reynolds design of 70-ton hopper car shows a weight reduction of 13,832 lb. The weight analysis is shown in Table III. In order to convert the weight reduction in the 70-ton hopper cars to profitable revenue payload, the car body was increased in size by 219 cu. ft. over the A.A.R. standard car with the result that seven more tons of coal can be hauled in this car.

The aluminum plates are of high-strength aluminum alloy, and the side framing members are designed so that the deflection due to bulging load equals the deflection of the steel car, thus lowering the unit stress and increasing the factor of safety. Aluminum rivets are used throughout the car except in the underframe and bolster connections.

For the design of freight cars, the engineer has a number of aluminum alloys to choose from, but is usually in doubt which alloy will be best suited for a particular part of the car. The alloys recommended

for load-carrying framing are, in the order of preference, 17S-T, R 361-T, and R 361-W. Alloys 17S-T and R 361-T have strength equal to that of open-hearth steel and should be used wherever no severe offsetting or forming is required.

R 361-W is recommended for parts requiring severe offsetting or forming. The strength of R 361-W is about one-half of the strength of R 361-T or 17S-T, and if aluminum parts are designed to equal deflection of similar steel parts, usually the stresses will be low enough to use R 361-W. When maximum strength is required, then the formed shapes can be age-hardened to R 361-T. Shapes of 17S-T or R 361-T can be offset or formed by heating the material to 450 deg. F. if not allowed to remain at this temperature for more than half an hour; otherwise, the longer period will affect the temper and cause loss of tensile strength.

For outside sheathing of the car, the aluminum alloys recommended are, in the order of preference, R 301-T, R 301-W, R 301-O, R 361-T, R 361-W, and R 361-O. Alloys in "T" temper should be used for parts without severe bends or flanges and only when the proper bend radii can be used. For parts requiring flanging and some forming, and if proper bend radii can be used, "W" temper alloys should be

Table I—Comparative Weights of Aluminum Box-Car Parts

	Weights, lb.		
	M.&St.L.	Alton	C.R.I.&P.
Trucks	13,000	13,760	18,560
Steel underframe	10,200	10,600	10,600
Roof, aluminum	833	833	833
Ends, aluminum	1,028	1,028	1,028
Doors, aluminum and steel	738	652	738
Running boards and brake step	186	186	186
Aluminum sides	3,996	3,995	3,998
Lumber, insulation, and paint	6,570	6,500	6,500
Safety appliances	377	377	377
Hand brakes	72	69	80
Weight of car body	24,000	24,240	24,340
Total weight on rail	37,000	38,000	42,900
Weight Analysis by Materials			
Weight of aluminum in underframe	520		Lb. Per Cent
Weight of aluminum in superstructure	6,495		—
Total aluminum in car	7,015		29.2
Total steel in car	10,415		43.4
Total lumber, paint, etc., in car	6,570		27.4
Total weight of car body	24,000		100.0

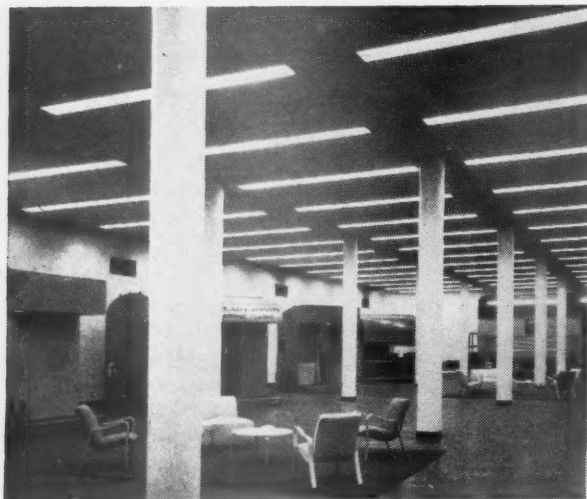
Table II—Weight Comparison of 50-Ton Box Cars With Standard Inside Dimensions

	Car-body parts, lb.	
	A.A.R. Plate 1500 standard car	Reynolds alum. Car, Drawing C-400
Underframe	7,260	5,497
Sides	5,800	2,696
Ends	2,430	1,975*
Roof	1,830	700
Running Board	370	233
Doors	1,620	637
Coupling equipment	3,350	2,820
Body brakes	1,350†	1,350‡
Safety appliances	410	295
Hand brake	100	80
Misc. rivets, bolts, etc.	1,360	460
Wood lining and floor	4,980	4,980
Weight of car body	30,860	21,723
Weight of trucks	15,600	15,600
Total weight on rail	46,460	37,323
Load limit	122,540	131,677
Load limit on rail	169,000	169,000
Total weight of aluminum in car		4,966
Direct weight saving by use of aluminum only (not taking into account the weight saving coupling equipment, ends, and parts steel parts in doors) ...		7,880
Actual on rail weight difference: (46,460-37,323)		9,137

* High-tensile low-alloy steel Dreadnaught ends

† AB

‡ ABEL



Main exhibit hall of the Budd Company, Philadelphia, Pa., showing "mock ups" of passenger car interiors, including berths and rooms

used. For parts requiring severe forming combined with a draw, "O" temper, which is in the annealed state, should be used. Alloys in the "O" temper can be heat treated to "W" or "T" if strength is required. Whenever heat treating of formed parts is required, the services of an aluminum metallurgist or service engineer should be engaged. In the heat-treating operation, considerable distortion will be experienced, varying the intensity according to the size and shape. Hence this word of caution.

Aluminum alloys for rivets are recommended, in their order of preference, as follows: A 17S-T, or 53S-W or R 361-W. Usually rivets up to 1/2 in. diameter can be driven cold with a hand-pneumatic or power-squeeze riveter. Rivets larger than 1/2 in. diameter should be driven hot. All riveting, of course, should be done with power-squeeze machines. A modified cone head on the driven side is recommended in preference to the button head because it takes less pressure to form such a head and the strength is equal if not greater. An aluminum service engineer should be consulted when information is required for proper procedure for driving rivets hot.

There are some conditions where aluminum is exposed to alkaline materials. In such cases, proper precaution is necessary, and parts so exposed should be coated with zinc or zinc-chromate paint.

Riveted joints should be waterproofed with a mastic material which will not harden and will not be injurious to aluminum. There are several products on the market, and most paint manufacturers can supply them.

The economics of aluminum freight cars will not be discussed at this time because there is a variance of opinion as to the proper method of determining cost of weight reduction. The railroads do not agree at the present time on the cost of hauling one ton one mile. Figures from one mill to five mills per ton-mile have been used; however, any figure chosen can usually be refuted by any individual railroad as not applying to its operating conditions. But everyone will agree that it does cost a certain amount of money to haul one ton over every mile of railroad; and it is hoped that with Diesel locomotive operation (with which more accurate records of fuel consumption can be maintained) more accurate costs can be developed.

Table III—Weight Analysis of Reynolds 70-Ton Hopper Car With Three-Hopper Arrangement

	Aluminum, Lb.			
	Castings and forgings	Sheet and plate	Shapes and bars	Total
Sides	—	2,150	1,803	3,953
Floor	—	2,307	183	2,490
Crossbearers	—	354	227	581
Ends	—	182	436	618
Brake step	—	—	15	15
Underframe aluminum parts ..	—	63	107	170
Rivets	—	—	240	240
Hopper-door frames (castings) ..	360	—	—	360
Hopper doors	250	—	—	250
Hopper-door fittings (forgings) ..	118	—	—	118
Total aluminum	728	5,056	3,011	8,795

Steel and Steel Specialties, Lb.		
Air brake (ABEL)	678	
Air brake, foundation arrangement	825	
Hopper-door mechanism	215	
Hand brake	125	
Center sill, O.H.S.	3,250	
Bolsters (Victory)	1,860	
Bolster center fillers (castings)	484	
Striking casting	330	
Cushion coupler carrier and positioning device (straight shank)	44	
Body center plates	184	
Couplers and yokes, Grade B	1,300	
Coupler-operating device	48	
Draft-gears and follower plates	710	
Draft keys and retainers	111	
Safety appliances	260	
Miscellaneous	339	

Total, steel parts and specialties	10,763
Total, aluminum	8,795

Total, car body

Comparison with Steel Car
Aluminum cars, lb. Steel car, lb.

	Barber S-2 truck	A-3 Ride Control truck	
Car body	8,795	8,795	22,737
Specialties and underframe	10,763	10,763	10,763
Trucks	16,570	16,665	16,600
Light weight of car	36,128	36,223	50,100
Load limit	173,872	173,777	159,900
Total load on rail, 6-in. by 11-in. journals	210,000	210,000	210,000
Capacity, cu. ft.	3,316	3,316	3,097
Weight of steel substituted by aluminum	22,737	22,737	—
Weight of aluminum	8,975	8,975	—
Weight reduction	13,832	13,832	—
Ratio of pay load to gross ld., per cent	82.75	82.75	76.1

Table IV—Weight Analysis of Reynolds 50-Ton Hopper-Car Design

	Aluminum, lb.			
	Castings and forgings	Sheet and plate	Shapes and bars	Total
Sides	—	1,171	1,326	2,497
Floor	—	2,280	172	2,452
Crossbearers	—	353	181	534
Ends	—	158	316	474
Brake step	—	—	12	12
Underframe aluminum parts ..	—	78	76	154
Rivets	—	—	150	150
Hopper doors	—	282	—	282
Hopper frame casting	330	—	—	330
Hopper door fittings	56	—	—	56
Total aluminum	386	4,322	2,233	6,941

Steel and Steel Specialties, Lb.		
Air brake (ABEL)	678	
Air brake, foundation arrangement	725	
Hopper-door mechanism	393	
Hand brake	125	
Center sill, O.H.S.	2,550	
Bolsters	1,595	
Bolster center fillers (castings)	484	
Striking casting	330	
Coupler carrier device (straight shank) ..	44	
Body center plates	184	
Couplers and yokes, Grade B	1,300	
Coupler operating device	48	
Draft gears and follower plates	710	
Draft keys and retainers	111	
Safety appliances	260	
Miscellaneous	333	

Total steel parts and specialties	9,870
Total aluminum	6,941

Total weight of car body

Comparison with Steel Car
Aluminum cars, lb. Steel car, lb.

	Barber S-2 truck	A-3 Ride Control truck	A.A.R.
Car body	6,941	6,941	17,530
Specialties and underframe	9,870	9,870	9,870
Trucks	14,032	13,965	14,100
Lightweight of car	30,843	30,776	41,500
Load limit	138,157	138,224	127,500
Total load on rail	169,000	169,000	169,000
Capacity, cu. ft. (10 in. heap)	2,645	2,645	2,408
Weight of steel substituted by aluminum	17,530	17,530	—
Weight of aluminum	6,941	6,941	—
Weight reduction	10,589	10,589	—
Ratio of pay load to gross load, per cent	81.4	81.4	74.1

WHAT THE ATTORNEY GENERAL THINKS OF THE RAILROADS

Since a lot of automobiles and comparatively few railroad cars were produced in 1947, it is concluded that the automotive industry is progressive and the railroads aren't

By **TOM C. CLARK**

Attorney General of the United States

We reproduce herewith the speech of Attorney General Tom C. Clark at the first annual dinner of the Federation for Railway Progress at New York on February 24. Railroad people will be interested in Mr. Clark's delving into the history of railroad technology; in his disclosure of some peculiar iniquities in the "land grants" and his conclusion that they afford a parallel which excuses present-day subsidies to non-railroad transportation; and in his comparison of 1947 production of railroad cars and automobiles, as an indicator of the relative progressiveness of the railroad and automotive industries.

Students of jurisprudence will, doubtless, be edified by the reasoning which has enabled the attorney general to arrive at his opinion that the railroads would be as justified in claiming immunity from the revenue laws as from the anti-trust act.

Everyone will be heartened, not to say surprised, to learn of the deep respect and affection in which the attorney general holds the railroads.—Editor.

Where there is no vision the people perish," the Psalmist said. Railway progress demands vision too, or it will perish. It is of tremendous national importance. In fact the complete development of our country requires it and our national defense compels it.

There is no place in the railroad picture for the visionary who is a victim of fright, but for the visionary who pierces the veil of the future with an authentic second sight there is not only a great demand but an absolute necessity. Of course he has to take off his blinders. I know some visionaries who have worn blinders for years.

It used to be supposed that progress was an automatic and inevitable result of the course of human history. Thomas Jefferson spoke of "the progress of liberty" which had begun in the United States with the American Revolution, which would spread to other nations. Later, with the industrial revolution, arose a generation which had faith in the "manifest destiny" which was to result in the peopling and expansion of this nation, and in a tremendous scientific and technological development. Many people believed that the path of man's destiny led upward and onward, regardless of what wisdom and management were employed in the conduct of human concerns. It was believed that progress was inevitable and inescapable.

But now, after our experience with two world wars,

we realize that progress is not something which just happens. We know that retrogression is also possible in human experience. We have seen it in Germany. We know now that progress is a plant which must be cultivated in order to produce fruit—good fruit. It is not a weed, which will thrive even on a railroad track. When we develop that vision with a second sight, progress and accomplishment will follow. To do this we must be alert with all five of our watchful senses. The price of progress is an exacting one.

History of the Caboose

The record indicates that progress in railroading has been slow. Back in 1884 a few railroads knew of the caboose. At that time the cupola on its top was indeed "the new look." While these little shanties were in reality the command cars handling the freight of the nation, the cupola innovation was not even made available on most roads until the turn of the century. In 1885 a man named Phelps proposed a communication system for the railroads using the principle of electrical induction. The powers that be, however, turned him down.

Today we find the same system is being developed and the present-day shanties or command cars, which we call cabooses, have communication with the engineer as well as the stationmaster. Heretofore a man had to have good lungs and be able to run the gauntlet of freight cars between the caboose and the engine. So now, some sixty years after Mr. Phelps introduced a communication system, some of the railroads have finally come around to putting it into effect. As a result there is no necessity of having a cupola and they are being taken off of the caboose. If someone of vision had heeded Mr. Phelps there would have been no necessity of putting them on. Instead we would have had the beautiful bay windows that we see on a few of the more advanced cabooses over the country.

Some at the top acted like our recent New England thaws. Instead of thawing out at Mr. Phelps' suggestion they just froze over again and covered their heads and went back to sleep. As a matter of fact, railroading ran along this way until World War II brought us to the stark realizing that something must be done. One advertisement of an eastern railroad certainly tells the truth about it. That ad ran in a big headline "It is a h— of a way to run a railroad."

Railroading with a vision has picked up some since

V-J Day. However, *Business Week* says only 1,404 new cars, exclusive of freight cars, have been built. Eight hundred and twenty of these are coaches, and 85 sleepers. There are 2,236 cars now on order, of which 1,141 are Pullmans. It is estimated that it will take three more years to build these cars. It is also reported that only twelve railroads each have fifty or more passenger-train cars on order.

On the other side of the road, we know that 3,167,231 new automobiles, including trucks, were licensed in the United States last year. I fully realize that comparison between an automobile and a railroad car is similar to that of the proverbial rabbit and the elephant, but the figures of new units are likewise enormously one-sided. Pioneering continued in the automobile and trucking business, while in railroading it had been quiescent. The 100-mile trip that each man, woman and child took on the railroads in the United States last year was virtually in the same old coaches and equipment that they have been riding in for many years. Certainly they do not invite more trips. And on the merchandising side, the ten tons of freight that each man, woman and child in the United States shipped for an average of 500 miles over the railroads last year was with the same antiquated equipment and much of the same service that has been in vogue for half a century.

Railroading must keep up with the advancements in science. Each railroad in the country should be a laboratory for experimentation and research. By the use of the laboratories, innovations and improvements would keep this great transportation industry abreast of the times.

Public Welfare Must Be Uppermost

Improvements when discovered should be made available to other lines, as is generally done in the automobile and airplane industry. The public welfare must be held uppermost. Bottlenecks that have existed in transportation for years must be wiped out. The public also must be brought to the realization that there is more to railroading than rates. Service must be the watch word. They who serve well always sit at the head of the table—and it is the first table, too.

For a generation some in America have forgotten this simple principle. Many of us have concentrated our thoughts largely on what we, as individuals, could claim or hope for, or get, for ourselves from our fellow men, regardless of our own contribution to their interests. Some parents have devoted themselves to aiding their children in securing the maximum advantages merely for the children alone. The chief virtue of education, we are often told, is that income is thereby increased. We give little notice or less care to the obligations which each generation must assume to his fellow man. The ultimate question of late has been, it seems, "What is best for me?" That is putting it rather bluntly, but it rings true.

Take in your own industry, for example. I read the other day—and I quote:

Subsidies that give one system of transportation competitive advantages over another are not in keeping with the American system of free enterprise. All the railroads ask is that the principle of free competitive enterprise apply to all; that the service each renders a nation be the measure by which its existence is justified.

The author of this statement must have forgotten that in the original development of the railroad system we have today acts of Congress and of state legislatures granted land and other financial support to the then infant railway industry. I recall one road that received some five million acres of American land that requires its grantees and lessees to ship exclusively over its road. And further, it requires them to order their purchases sent over this one railroad.

This contract is reminiscent of the tie-in clauses in patent licensing. But it even goes them one better. This author also failed to mention that the railroads were also given the right of eminent domain—which is, as you know, the power of sovereignty itself—a power that is very seldom granted to private concerns.

Ever-Helpful Government

In recent years the Congress and the states have also legislated with regard to the law of torts which has a direct bearing on the liability of the railroads for personal injuries. Likewise, the railway labor laws of the country have established a continuity of operation in the railroads that is known in no other industry. The Congress has also created the Interstate Commerce Commission, which not only gives protection to shippers in communities engaging in interstate commerce, but also to the railroads. Certainly a thankful people through their federal and state governments have been considerate and ever-helpful to an industry that has been so important in the development of the country.

But the Congress has up to this date made the railroads, as it has all industry, subject to other laws, particularly the anti-trust laws. Nothing is more peculiarly American than the doctrine of free enterprise. I am confident that the railroads can live and prosper under the American system. I am confident they can furnish adequate transportation service to the public. Some in the industry seem to be skeptical about the traditional American method of doing business. They seek to obtain a status of special privilege exempting them from the competitive standards which are so vital to the American business structure.

As you know, at the present time there are two cases pending in the courts alleging restrictive policies on the part of the railroads which impede independence of action and managerial judgment. The Supreme Court took jurisdiction in one case, the so-called Georgia case. Each of these cases points up agreements between some of the roads depriving the individual railroad from effecting lower rates, adjusting schedules, and, in the case at Lincoln, Nebraska, of even installing air conditioning for the comfort of the public.

It is not surprising with this kind of agreement that our railroads are more or less still in the horse-and-buggy days. But what is surprising to me is that many prominent figures in the industry appear to be desirous of perpetuating this self-imposed burden, in that they advocate and urge the enactment of the so-called Bulwinkle Bill. This legislation would confer upon carriers a status of special privilege and exemption from the anti-trust laws. It would grant to the railroad organizations power over the industry which would be greater than those enjoyed by the Interstate Commerce Commission itself.

The Bulwinkle Bill would place in the hands of such

private organizations an immunity from prosecution on subjects over which the Congress has not seen fit to even entrust the Interstate Commerce Commission. For example, questions relating to equipment, schedules and time of departure and the arrival of trains would be beyond the control of the commission once it approved basic agreements. Likewise in the fixing of rates and charges of transportation, the private organizations of carriers would be given complete immunity from the anti-trust laws and would be enabled to engage in an unrestrained program of price-fixing.

Doubtless many other industries besides the railroad industry would be happy to be the beneficiary of legislation permitting them to engage in price-fixing. No industry should be placed above the law. The law should apply equally to all—for equal justice under the law is one of the basic principles of our democratic system. The fact that railroads are subject to regulation in the public interest is no justification for such a discrimination in their favor. Regulation merely means that the carriers are subject to certain obligations peculiar to themselves, in addition to the obligations which the law imposes upon all businesses generally. It does not mean that they should be permitted to escape from such general obligations.

One might as well argue that because the railroads are subject to regulation they should be exempted from the payment of taxes. But obviously the fact that they must obey the Interstate Commerce Act is no reason why they should be free to disregard the Internal Revenue Act or the Anti-Trust Act. Their status as public utilities means that there are more, not less, legal requirements with which they must comply.

It is therefore absurd to claim, as some railroad spokesmen do, that transportation is being placed under two masters. It should have but one master—the people; and to use the phrase of an old record—it should heed its master's voice more often.

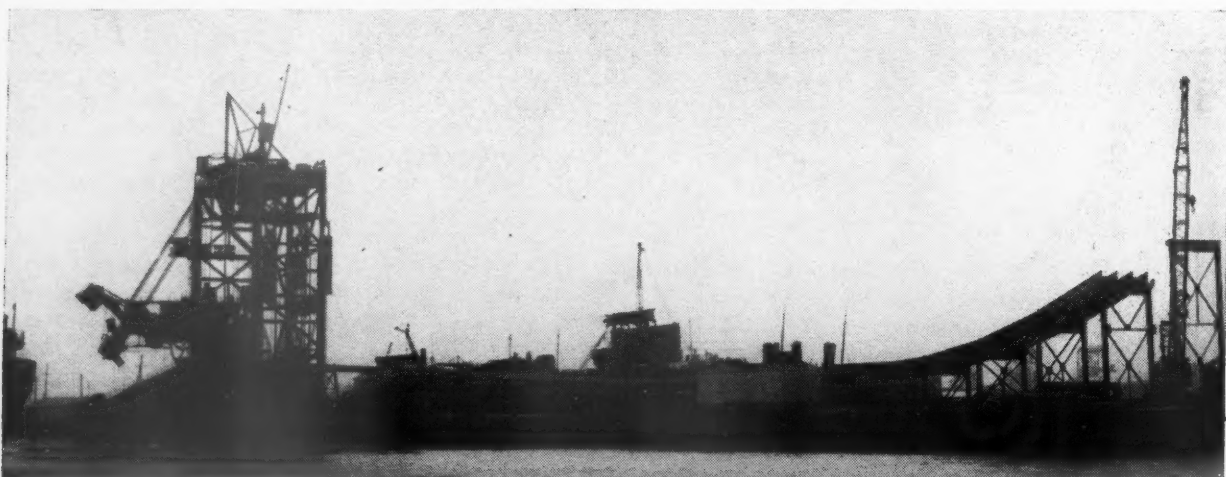
Now that I have tried to be constructive in pointing out some of the weakness of the railroads, let me say that I have nothing but the kindest feeling for those who operate the railroads, and that goes for management and labor. The railroads of the United States

have done more than any other single force to bring about the greatest federal union of states that the world has ever seen. The early pioneer railroaders were certainly men of vision and brains and brawn. They forged a band of steel around our country which has bound us together. Truly the railroads are often described as constituting the "backbone" of the nation's transportation system. They are vital to our industrial development. If by magic overnight the railroads of this country were to disappear, the handicap and burden to our industrial life would be indescribable. What I have said regarding the importance of railroads to the nation's economic and industrial life applies with even greater force when the requirements of national defense are kept in mind. During each war they have rendered monumental service. In the last war I am familiar with their operation. I venture to say that we could not have won the war so quickly had it not been for the railroads. Theirs was a service dedicated to the cause of victory.

So it is clearly apparent that both in war and peace the importance of railroads to American national life, to our industrial and military economy, is extremely vital. No wonder then that government regards "the maintenance and development of an economical and efficient railroad system" as "a matter of primary national concern."

It was because of this outstanding operation under the most difficult conditions that we, who were thinking of the privileges and duties of freedom, turned to the railroads for help. One of the railroads furnished the facilities that finally resulted in what is known in every community of America as "The Freedom Train." It is fitting that the railroads should be entrusted with the responsibility of carrying to over 300 cities in America the precious documents of our freedoms. It is fitting, because they helped to put life—reality into those written parchments.

In a sense every train is one of freedom, for by affording the facilities of transportation to the people the railroads promote unity, good-will and brotherhood and have won a place deep in the hearts of all Americans.



THE NEWEST COAL DUMPER ON THE GREAT LAKES NEARS COMPLETION AT TOLEDO, OHIO.—Being built by the Lakefront Dock & Railroad Terminal Co., a jointly owned subsidiary of the New York Central and Baltimore & Ohio, this dumper is part of a new \$18,500,000 coal and ore-handling facility designed to speed the loading and unloading of cars and boats. When completed the entire project will include three piers on which will be located two ore unloaders and three coal dumpers, supported by a new 5,400-car yard.



The traffic training manager introducing the public relations conference leader, D. W. Norris

TRAFFIC DEPARTMENT TRAINING ON THE NEW HAVEN

Active management participation and support has brought success for separate programs for supervisors, sales management personnel, sales representatives, and non-supervisory employees

By JOHN J. DANAHY
Manager, Traffic Training
New York, New Haven & Hartford

THE New Haven Railroad established a traffic training department on February 15, 1947. By December 4, 1947, the company was convinced that the effort and expense were justified. During this period of less than nine months, training programs were outlined and subsequently inaugurated for all classifications of employees within the traffic department—sales management personnel, sales representative personnel, supervisors, and non-supervisory employees. This department-wide training effort had one common objective, viz., better trained and more thoroughly informed employees.

The war years with their accompanying deluge of business, both passenger and freight, are now definitely past. Competition has returned—keen competition. The New Haven, like most other railroads, has evidenced its confidence in the future by large outlays of money for new equipment. To match this new equipment, the management decided, through formal training, to provide its personnel with fresh ideas and the modern techniques needed to sell the excellent services which this new equipment could give. Modernization of equipment was important, but modernization of per-

sonnel attitudes and grasp of their duties was equally so.

Training courses designed to fit the jobs of employees in each of the classifications mentioned have been prepared and are being or will be presented on a regularly scheduled basis. Our approach to, and results obtained from, supervisory training may be of interest.

As stated previously, on December 4, 1947, the company was satisfied that its program had justified the effort and expense. On that date the supervisory phase of the department-wide training program was completed and the participants, the traffic department supervisors, told the training staff, in the form of "critiques," that management had given them a top-notch training program. They were outspoken in their expressions of thanks for the opportunity the program had given them to review their responsibilities and to discuss the many problems and solutions thereto, both among themselves and with their respective departmental superiors. Reactions to the first completed phase of the program were enthusiastically favorable.

In preparing the training program for traffic department supervisors, the staff charged with carrying

out the project held the opinion that this group was deserving of the best it had to offer. Because of the present tendency of progressive management to place responsibility for profit as far down in the organization as possible, the work of the supervisors has taken on a new importance. It is this group which oversees the many details necessary to the successful operation and profitable selling of a railroad's services; it is this group which directs the productivity of the numerous railroad clerical employees. The training staff wanted to make certain that traffic department supervisors recognized their own importance in relation to their company's success.

In compiling the program for supervisors, the training staff asked itself the question: "What do we think they *want to know*?"—not "What do we think they *should know*?" Six subjects were selected which the supervisors felt would provide them with a strong foundation in guiding their own activities and in directing the employees under their jurisdiction: (1) company organization, (2) office management, (3) personnel selection and training, (4) human relations, (5) labor relations, and (6) public relations.

How to Present the Topics?

How to present these topics was the next question. Should conferences be held once a week for a series of six weeks until all subjects had been treated, or would it be more practical and effective to go "whole hog," relieving supervisors of their duties for three full days to concentrate on these subjects so important to their supervisory function. The training staff favored the latter approach, believing that such a procedure would divorce the supervisors completely from their work (with its accompanying worry) and give them nothing to do except think and talk about good supervision and how it could be attained and practiced. The training groups were taken off of company property into a private hotel conference room for these meetings.

Two subjects were scheduled for each day; one during the morning, and the second during the afternoon, each led by a management representative conversant with the topic under discussion. Luncheon was served to the group between these daily sessions and sufficient "breaks" were taken during each conference to eliminate the danger of monotony. Two weeks prior to the assigned meeting date, each supervisor received a 36-page "conference outline" covering the subjects previously mentioned. This allowed sufficient time for the individual to familiarize himself with topics to be discussed and to stimulate his thinking about them.

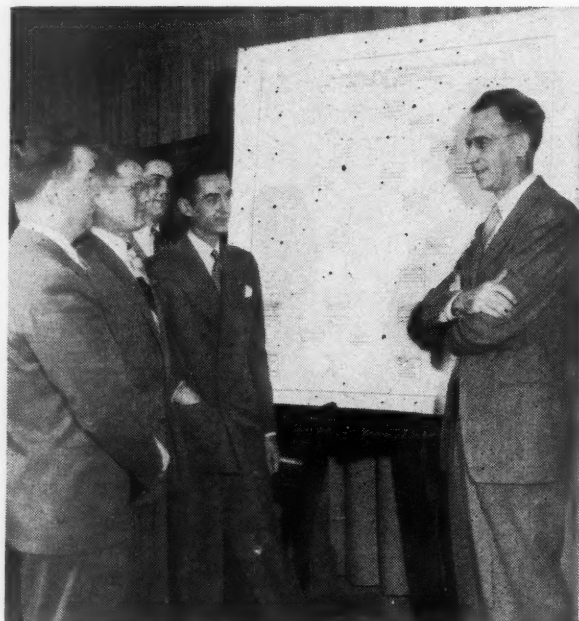
Fifteen supervisors—proportionately drawn from the freight sales and service, passenger traffic, freight traffic (rates and divisions), and traffic research and development departments—comprised each training group.

As leaders for each conference subject, the traffic department was assisted by the *public relations manager* who, in addition to leading the discussion on public relations, pointed out to these supervisors how necessary was their cooperation in providing the follow-through needed to assure maximum effect for the company's advertising and public relations efforts; the *employment manager*, who led the conference on labor relations; and the *supervisor of office systems and procedures*, who explained and discussed the most

modern techniques of efficient, effective, and productive office management. The manager of traffic training presided during the discussion of both personnel selection and training, and human relations. The staff officers of the traffic department, which included the vice-president in charge of traffic, the passenger traffic manager, the freight traffic manager, the general freight sales manager, and the manager of traffic research and development, covered the subject of organization. The vice-president in charge of traffic explained the overall company organization and the interdependence of one department on the others for successful operation. His staff officers concentrated on organization within their respective departments. In addition, through the use of prepared organization charts, they showed each supervisor his location in the organizational picture, emphasizing the importance with which they viewed the supervisor's function.

The subjects, so diversified in nature—together with the presence and participation of staff officers of the traffic and other departments as conference leaders—provided the variety needed to minimize the potential monotony which might exist through any lengthy program of this kind. Motion pictures, charts, graphs, displays, photographs, etc., were all used to supplement discussions and to clarify the points under consideration. At the conclusion of each three-day conference, those supervisors from points in New York, New Haven, Bridgeport, and Hartford were given special passes, personally signed by our president, Howard S. Palmer, which permitted their returning home from Boston on the New Haven's extra-fare train, the "Merchants Limited," on which free transportation is not ordinarily valid.

Knowing management's penchant for measuring production against costs, the staff of the traffic training department wanted to have an answer, should the question be put as to the value of this training. Since the establishment of the training department, the staff



Supervisors discussing organization

has always felt that training programs should be judged, not by the "flossiness" of their texts nor the statements of their "producers," but rather by the opinions of the participants themselves. Just as an audience judges the worth of a play, the supervisors were asked to speak their minds in the form of "critiques," submitted either signed or unsigned at the conclusion of each conference, stating their opinion of the program. They were asked to "pull no punches," but to speak freely with a view toward helping both their and management's efforts in effecting good supervision.

Frankly, the training staff had its fingers crossed as it awaited the opinions of those attending the first three-day conference. It must be confessed that the staff had violated in its presentation quite a few "textbook principles" of training. From personal observation gathered through discussions with the individuals during the luncheons and the many "breaks" taken during the conference, the staff had the impression that the program was being well received. But it was not certain.

Comment Was Favorable

When the "critiques" from the first group arrived, the training staff feared it might be dreaming, so strongly favorable was the comment; but when those participating in the remaining groups sounded the same keynote of satisfaction, it was clear that the program had succeeded. If there had been any doubts in the minds of the staff officers of the traffic department concerning a "return on the investment" of time, money, and effort which had gone into this program, they have now completely disappeared.

Approximately 80 supervisors participated in one of the three-day conferences arranged for this classification and every one of them, without exception, expressed written thanks to the management for giving them this opportunity to sit down and discuss with their department heads the many problems relating to their jobs. Talking "man to man" with staff officers from the traffic and other departments had given them an appreciation of the importance of their work—and a realization that management, too, recognized its importance.

Some excerpts from the comment submitted by traffic department supervisors speak for themselves in evaluating an intelligently prepared, interestingly presented, and "management-backed" training program:

"I feel now, more than ever, my importance in a very big and very important wheel, the New Haven Railroad. My enthusiasm will be passed down to those under my jurisdiction, acting as a morale builder right through the entire department, which to my mind, is the best dividend any organization can receive. It was a pleasure to have our officials recognize the importance of the supervisor's function."

"The conference satisfied me to the nth degree that I'm not only in the right business, but that I'm working for the right company."

"I now have a better understanding about the importance of my job in the company."

"I came away with a better knowledge of my company's problems and what is expected of me in helping to lighten these problems."

"These three days, crammed full of progressive ideas,

thoughts for progressive action, and man-to-man exchanges of experiences, make me feel that our management has put its best foot forward and taken a ton-mile stride!"

"I, and the supervisors with whom I have talked, now appreciate more than ever before that we are a team working in harmony with management."

"I reported for this conference doubtful as to its possible benefits. I leave the conference convinced of its value."

"Reviewing my forty years' experience with the New Haven, this conference takes first place in productive efforts."

"I hope these programs will continue. They're worth a thousand times their cost."

Programs to Continue

They certainly will continue. In addition to these comments, the supervisors made many recommendations to their department heads which they felt would help them to do a better job of supervision. The management welcomed these recommendations and intends, wherever feasible, to put them in effect.

From the foregoing, it is obvious that the traffic department was fortunate in "hitting the jackpot with the first nickel." These men and women returned to their supervisory positions throughout the system with a renewed confidence and interest. From reports emanating not only from their immediate superiors, but also from their subordinates (who attend our non-supervisory training program), the management of the traffic department feels that supervisors have been given the background and training necessary to meet the problems ahead. If other programs which are now being conducted for traffic department management, sales, and non-supervisory personnel prove half as successful as this supervisory phase, the company will consider the effort more than justified.

Should a formula for successful training be sought, our answer would be:

1. Establishment of a program objective.
2. Cooperation from and personal participation, when possible, by top management.
3. Intelligent selection of pertinent topics.
4. Pleasant surroundings for the holding of conferences.
5. Freedom of expression by all participants.

Had the training program been merely the enterprise of its manager alone, it could never have succeeded. Any training director is helpless if he lacks management's full cooperation and interest. It has only been through the assistance of every employee within the New Haven's traffic department, from the vice-president in charge of traffic down to the newest office boy, that the program has succeeded in attaining such satisfactory results. Nor can too much be said for the departments of the railroad outside the traffic department, which gave so willingly of their time and effort to assure the program's success.

This excellent cooperation indicates the recognition and support which the New Haven's management has given to employee training. Had the program lacked management's full approval, complete cooperation, and personal participation, "we might just as well have stood in bed," as Mike Jacobs is reputed to have said.

A HIGH-PRESSURE LOCOMOTIVE BOILER

Steam Locomotive Research Institute design has closely spaced water-tube walls in the firebox and a fire-tube barrel — The tubes are welded in top and bottom drums

One of the projects to which the Steam Locomotive Research Institute has given considerable study is the design of a locomotive boiler which will operate satisfactorily at a pressure higher than the present usual maximum of 300 lb. per sq. in. The Stephenson locomotive boiler with its water-enclosed firebox and fire-tube barrel has inherent technical and mechanical advantages which have given it a practical monopoly in steam locomotive practice. Its one constructional weakness has been the firebox with its flat walls supported by staybolts. As pressures have gone up, staybolts have come closer together, water circulation has been impeded, and maintenance costs have increased. At current boiler pressures the major part of locomotive boiler maintenance cost is accounted for by firebox repairs.

It is generally conceded that boiler pressures of 300 to 325 lb. per sq. in. represent the practical maximum for staybolted fireboxes. From the prime mover standpoint, higher pressures offer the advantage of greater power within the same space and also greater thermal efficiency. It is believed that a pressure of 600 lb. per sq. in. could be used with advantage in American railroad practice, the prime mover being modified to take full advantage of the greater possible expansion. The conventional single-expansion cylinders would be replaced by uniflow, multiple-expansion, or turbine operation.

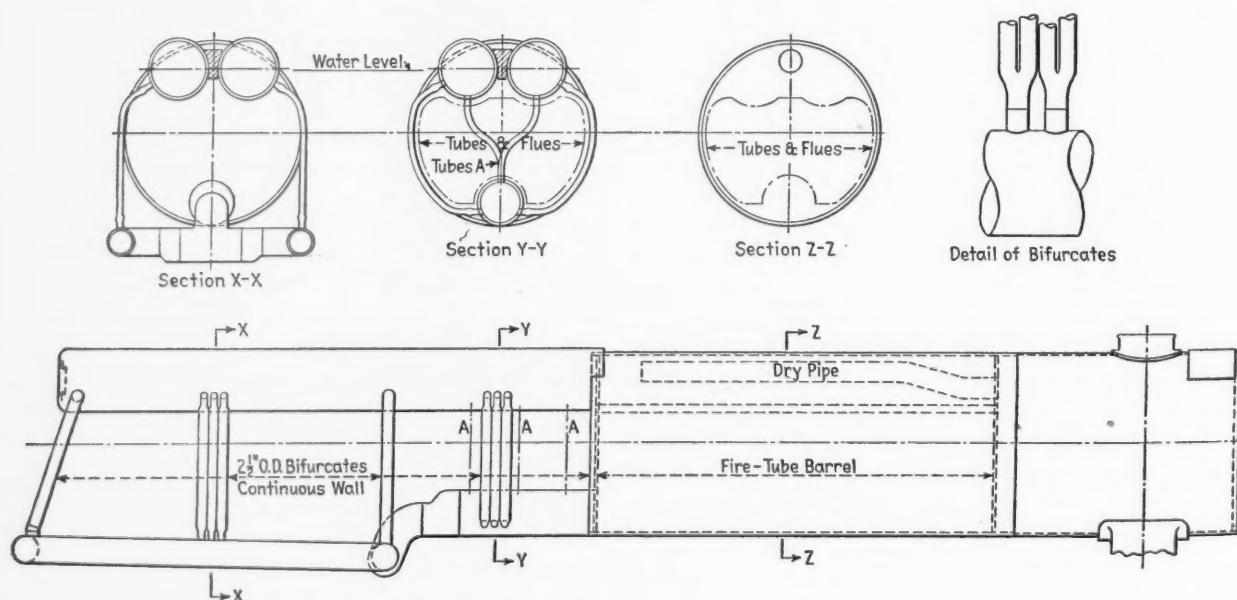
With the present trend to higher thermal efficiency, it is definitely desirable to provide a locomotive boiler for higher steam pressures, and with firebox maintenance minimized.

In view of stationary practice, it is natural to think first of a water-tube type boiler. However, extensive comparative study by the Steam Locomotive Research Institute has shown that after the gases of combustion leave the firebox, the intensive heat absorption required to produce a compact locomotive boiler can be obtained more efficiently with a fire-tube barrel than with any other tube arrangement. This conventional barrel does not limit the pressure and has the great advantage of being a strong structural element in the anatomy of the locomotive.

Advantages Long Recognized

The advantages of a locomotive firebox with water-tube walls have long been recognized in America and Europe. Many designs have been made and a considerable number of boilers have been built. The advantages have been demonstrated, but certain constructional troubles have developed. A recent survey of the situation by the institute has led to the conclusion that many of the difficulties with earlier designs of water-tube fireboxes can be avoided by using modern methods of boiler construction as developed in stationary practice. Stationary boilers with water-tube fireboxes are built today for pressures up to 1,250 lb. per sq. in. With modern methods and materials there should be no serious difficulty in building a locomotive boiler for 600 lb. per sq. in.

The design developed by the Steam Locomotive Research Institute follows closely the outline of a conventional locomotive boiler and can usually be built



A high-pressure locomotive boiler with water-tube firebox and fire-tube barrel

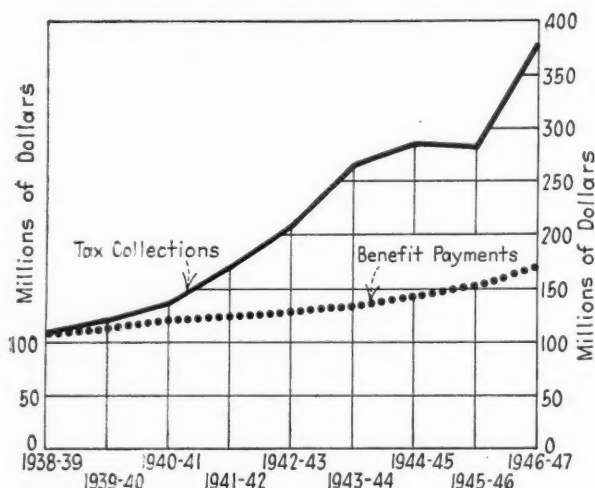
to fit an existing chassis if desired. Grate area, firebox, and combustion chamber are arranged as in a conventional boiler. No staybolts are used. The firebox and combustion-chamber walls are closely spaced, bifurcated tubes of the type used in high-pressure stationary boilers.

These tubes terminate in a top drum or drums forming the roof of the firebox and in a smaller-diameter bottom drum.

In earlier locomotive water-tube fireboxes the tubes were rolled into the drums. This required a rather wide space between tubes and insulation was difficult. In the institute design the use of bifurcated tubes welded into the top and bottom drums provides a practically continuous water wall.

It should be noted that the use of water-tube firebox walls reduces greatly the damage likely to occur in the case of low water.

RETIREMENT BOARD ACTIVITIES REACH NEW PEAKS



Railroad retirement tax collections for the fiscal years 1938-39 through 1946-47 show a widening spread over benefit payments

Applications for railroaders' retirement and death benefits in the fiscal year ended June 30, 1947, rose 47 per cent over the previous year, according to the annual report of the Railroad Retirement Board just released. The large increase in applications—there were approximately 84,000—was due to the greater coverage of the retirement act as amended subsequent to the passage of the so-called Crosser Act in July, 1946. Under the liberalized provisions of the act, which became effective January 1, 1947, many workers already retired, or their survivors, became eligible for benefits for the first time.

Despite the total increases in applicants which resulted from the increased scope of the act, fewer older workers applied for annuities, probably due, it was explained, to the good earning possibilities in remaining on the railroad payrolls, to the increased cost of living in retirement, and, perhaps, to some extent, to the addition of sickness benefits to carry them over short periods of unemployment due to poor health. Thus, despite the increase in applicants, the number of workers remaining in service at ages 65 and over reached a new high for the eighth consecutive year.

A record number—490,000—drew a total of \$219,700,000 in benefits during the 1946-47 fiscal year. The greatest portion of the disbursements—\$158,700,000—went to 209,000 retired railroaders. Unemployed railroad men numbering 225,000 received a total of \$46,600,000, while the families of deceased workers were paid a total of \$14,400,000. By the end of the fiscal year, 231,000 persons were receiving monthly retirement and death-benefit payments totalling \$14,700,000 a month.

Collections Exceed Disbursements

Taxes collected from the railroads and their employees under the Railroad Retirement Act totalled \$380,057,000 for the year 1946-47, the largest collection to date, and overshadowing the increase in benefit payments. The amount collected was well in excess of estimates because of the continued high level of employment and the general wage increases granted in 1946. Benefit payments represented only 46 per cent of tax collections, which, as illustrated by the accompanying chart, was the lowest ratio since enactment of the retirement law.

The balance in the retirement account at the beginning of the year amounted to \$660,934,000. The 1946-47 appropriation amounted to \$298,233,000 (taxes, under the act, go into the federal treasury and the board is financed by equivalent congressional appropriations), and interest on the invested portion of the account amounted to \$24,187,000, representing total receipts of \$322,420,000. Payments amounted to \$173,101,000 during the year, so that the balance at the close of the year stood at a record \$810,253,000.

Collections from the carriers for support of the Unemployment Insurance Act amounted to \$141,770,000 during the fiscal year 1946-47. Expenditures totalled \$49,235,000—\$46,600,000 in benefits and the balance for administration. The excess of collections over expenditures increased the balance in this account to a record \$858,762,000 at the year's end.

The Retirement Board asserts it is set up so that, at the current tax rates, it is sound actuarially whenever the annual railroad payroll exceeds \$3,500,000. Since the latter figure now appears to be a conservative one, the retirement system, according to the board, is operating on a full actuarial level-cost basis.



(See April issue of Railway Engineering and Maintenance for other candid photographs)

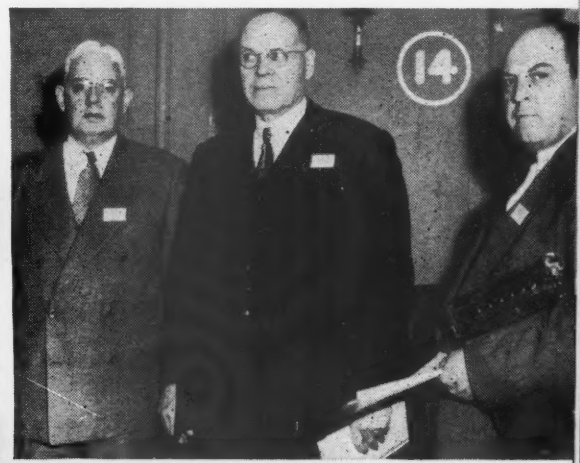
(All names read left to right)

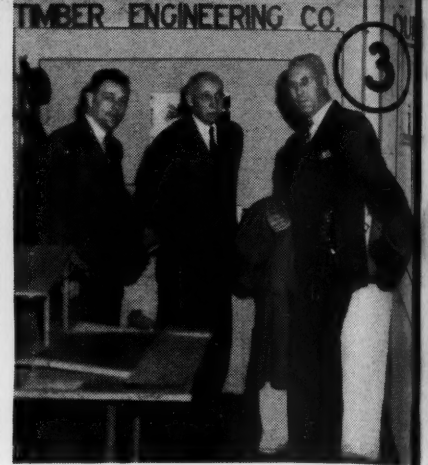
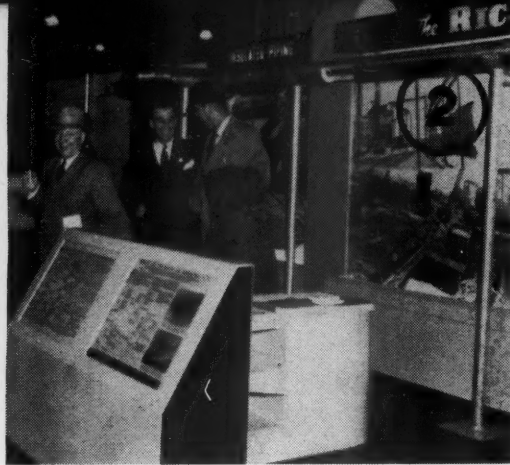
(1) J. S. Hancock (D. T. & I.), F. G. Campbell (E. J. & S.); (2) R. P. Winton and W. P. Wiltsee (N. & W.); (3) "Danny" Helman (doorman at A. R. E. A. conventions for the past 15 years); (4) A group of Rock Island officers—W. H. Hillis, H. T. Livingston, H. M. Long, J. F. Marsh, Roy Lumpkin, W. E. Helmerding and F. W. Madison; (5) Pennsylvania representatives included P. E. Feucht, W. W. Patchell, C. G. Grove, L. E. Gingerich and H. J. Kerstetter; (6) C. H. Blackman, E. Wise, Jr. (both L. & N.), R. J. Gammie (T. & P.), L. L. Adams (L. & N.); (7) E. F. Salisbury (K. C. S.), E. L. Gosnell (Reading), C. E. Sloan (B. & O.), W. N. Young (Laketront Dock & R. R. Term.), F. W. Blitz (Reading); (8) R. E. Schuett, D. H. Shoemaker and Bernard Blum (all N. P.); (9) S. E. Armstrong (N. Y. C.), J. L. Gressitt and S. R. Hursh (both P. R. R.); (10) A. C. Clarke and C. B. Harveson (both B. & O.); (11) E. C. Vandenberg (C. & N. W.), and R. J. Middleton (C. M. St. P. & P.); (12) Armstrong Chinn (T. R. R. A. St. L.), president, A. R. E. A.; (13) Part of the speaker's table at the annual luncheon on Wednesday—C. H. Mottier (I. C.), president-elect, A. R. E. A., Clark Hungerford (president, S. L.-S. F.), Armstrong Chinn, F. S. Schwinn (M. P.), vice-president, A. R. E. A., C. H. Buford (president, C. M. St. P. & P.), G. L. Sitton (Sou.), vice-president-elect, A. R. E. A.; (14) A. G. Reese, H. R. Clarke and E. J. Brown (all C. E. & Q.); (15) G. B. Campbell, F. S. Schwinn, and A. A. Miller (all M. P.); (16) An Erie group at the convention—B. Blowers, C. K. Scott and H. J. Wechselder; (17) R. W. E. Bowler (P. R. R.), J. A. Blalock, E. M. Hastings, D. C. Hastings (all R. F. & P.), O. J. Geyer (C. & O.), H. Austill (T. R. R. A. St. L.); (18) A New England group at the convention—H. F. Fifield, T. G. Sughrue, J. W. Wiggins (all B. & M.), S. G. Phillips, Allen Hazen (both Me. Cent.), and O. C. Benson (B. & M.).



A CAMERA VISITS THE A. R. E. A. MEETING

Engineering officers as seen in informal groups at convention, March 16-18. A complete report of business sessions was published last week





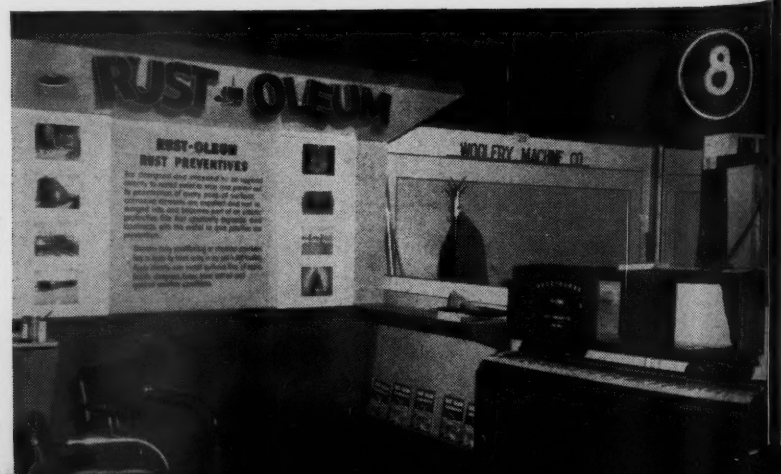
(See April issue of Railway Engineering and Maintenance for other photographs of exhibit)

AMONG THE SUPPLIERS AT N.R.A.A. SHOW

(All names read left to right)



(1) Gradall Division, Warner & Swasey Co.—C. M. Barker (J. P. Waite, Inc.), J. P. Waite (J. P. Waite, Inc.), S. F. Beatty, Jr.; (2) The Ric-Wil Company—C. W. Seadler (A. C. & Y.), F. F. Lentz (A. C. & Y.), W. Bartel; (3) Timber Engineering Company—R. L. Fletcher, H. M. Church (C. & O.-retired), Frank J. Hanrahan; (4) Railroad Accessories Corporation—B. A. Lundy, Jr., M. R. Waller, B. A. Lundy, Sr., E. H. Sockwell; (5) Western Railroad Supply Company—D. H. Worcester (Chicago Transit Authority), G. S. Blackmore, Louis Charron (Ford Motor Company), Samuel Miskelly, John Hensel; (6) Caterpillar Tractor Company—Ralph V. Bradley, Charles Z. Holmes, W. H. Grau, F. E. Schaumburg; (7) Allis-Chalmers Manufacturing Company—Jack Largent (M.P.), Fred Schwinn, W. M. Schroeder; (8) Rust-Oleum Corp.—with Woolery Machine Company booth in background; (9) Pettibone Mulliken Corporation—G. J. Silbeck, J. A. Mould, L. Harlacher; (10) Koppers Company—Walter Jacobson, D. D. Hamilton, M. J. Steiner, J. F. Walsh, H. M. Church (C. & O.-retired), S. J. Katz; (11) Taylor-Colquitt Company—D. M. Graves, W. E. Gadd, M. S. Hudson; (12) Rail Joint Company, Inc.—Frank Wood, R. B. Jones (C. P. R.), Tom Ryan, Hugh Gordon (C. P. R.), J. M. MacBride (C. P. R.); (13) National Lock Washer Company—D. W. Hallberg, H. Stone; (14) Ekaton Manufacturing Company, Reliance Division—K. S. Cowlin (Electro-Refractories & Alloys Corp.), R. B. Little, Frank Howell, E. D. Cowlin, S. E. Cowlin; (15) Unit Crane & Shovel Corp.—R. A. Boyle, H. O. Henwood, J. W. Lenahan; (16) Electric Tapper & Equipment Co.—J. M. Webb, H. W. Cutshall, M. S. Westlund, A. B. Holt, J. R. Kanan (C. & S.), W. C. Oest (F. W. & D. C.); (17) Duff-Norton Manufacturing Company—N. A. Sinclair, W. W. Moody, J. Gilchrist, E. C. Gunther, Frank Schwerin; (18) Barber-Greene Company—W. H. Brett, M. C. Ham.





SHOWS ROADS' CONTRIBUTION TO NATIONAL INCOME

I.C.C. bureau's "Monthly Comment" puts 1947 proportion at 2.89 per cent, which supplants 1946's 3.01 per cent as lowest since 1918

Class I railroads in 1947 produced 2.89 per cent of the total national income, a drop from the 1946 figure of 3.01 per cent which was thus supplanted as the lowest since 1918, according to the latest "Monthly Comment" issued by the Bureau of Transport Economics and Statistics of the Interstate Commerce Commission. The national income produced by the railroads is considered to be the compensation to employees (including employee benefits) and the earnings on capital, which includes interest accrued, rents paid, cash dividends declared, and "business savings," i.e. undistributed earnings.

On that basis, the Class I roads last year produced \$5,848 million in national income. This was 8.9 per cent above the comparable 1946 figure, but was a smaller proportion of the total national income, because the latter, meanwhile, increased 13.7 per cent. Of the \$5,848 million produced in 1947, "compensation to employees" took 80.6 per cent or \$4,713 million, while "earnings on capital" took 19.4 per cent or \$1,135 million. The latter included \$359 million in interest accrued, \$296 million in rent paid, \$236 million in cash dividends declared, and \$244 million in "business savings."

Employee and Capital Shares

With respect to the 1947 shares of employees and capital, the bureau pointed out that the 80.6 per cent for labor and the 19.4 per cent for capital represented "the highest and lowest proportions . . . which were attributable to these respective factors in any year during the period 1919-1947, excepting 1946," when the respective proportions were 82.5 per cent and 17.5 per cent. A tabulation by five-year intervals showed that the employees' proportion was 72.6 per cent in 1919; 68.2 per cent in 1924; 63.1 per cent in 1929; 67 per cent in 1934; 69.5 per cent in 1939; and 73.5 per cent in 1944.

The present article gives only the 1947 and 1946 figures (the 2.89 per cent and 3.01 per cent noted above) on the Class I roads' contribution to total national income, but an article on the 1946 situation which appeared in the July, 1947, "Comment" showed this relationship by five-year intervals back to 1919. The figure was 5.75 per cent for that year; 6.02 per cent for 1924; 5.57 per cent for 1929; 4.75 per cent for 1934; 3.96 per cent for 1939; and 3.47 per cent for 1944.

Continuing the bureau's analysis of 1947 financial results, the present "Comment" noted that 31 Class I line-haul steam roads reported net deficits aggregating \$41.5 million for last year, while 92 roads reported net incomes totaling \$521.5 million. The resultant overall

net income of \$480 million compared with \$290.8 million in 1946 when 35 roads reported net deficits aggregating \$63.2 million and 88 reported net incomes totaling \$354 million. By regions the 1947 net income was distributed, in millions of dollars, as follows: New England, \$0.4; Great Lakes, \$38.5; Central Eastern, \$42.8; Pocahontas, \$80.4; Southern, \$55.7; Northwestern, \$60.3; Central Western, \$153.2; Southwestern, \$48.6.

Effect of "Wringer"

Comparative 1941 and 1947 figures showed that the latter year's net income was off only \$21.4 million or 4.3 per cent as compared with 1941, despite a drop of \$217.6 million or 21.8 per cent in net railway operating income. The bureau explained that the 1947 net income, as compared with 1941, "was favorably affected by a reduction of \$185.6 million in the amount of fixed charges and an increase of \$52.1 million in other incomes." The lower fixed charges "resulted primarily from the reorganization of many large railways" during the 1941-1947 period. The ratio of income available for fixed charges to fixed charges increased from 1.84 in 1941 to 2.22 in 1947. The 1947 dividend appropriations of \$236.5 million were only slightly above the 1946 declarations totaling \$234.6 millions, and 27.4 per cent above the 1941 dividends of \$185.8 million.

Another tabulation showed the coverage of fixed charges in 1947 by 25 Class I steam roads with annual operating revenues above \$100 million, their 1947 gross representing 76 per cent of the total for all Class I roads. The ratios of available income to fixed charges ranged from 18.33 in the case of the Norfolk & Western to 0.87 for the New York, New Haven & Hartford. Next lowest ratios to the New Haven's were the New York Central's 1.06 and the Pennsylvania's 1.19. The figures for all Class I roads by districts showed 1947 ratios of income to fixed charges as follows: Eastern district, 1.47; Pocahontas region, 7.32; Southern region, 2.11; Western district, 2.90.

The net working capital of the Class I roads as of December 31, 1947, was shown at \$1,633.1 million, \$280.4 million under the December 31, 1946, figure of \$1,913.5 million. Excluding materials and supplies, the drop was \$392 million—from \$1,259.6 million to \$867.6 million. The ratio of current assets to current liabilities was down from 2.21 to 1.84, while the quick-asset ratio (cash and temporary cash investments) to current liabilities was down from 1.25 to 0.98. The bureau noted that the latter was "somewhat better" than the December 31, 1941, figure of 0.82.

The bureau's usual analysis of the latest monthly results showed that the freight revenue for January

was 2.3 per cent less than in December, but 11.3 per cent above January, 1947. January passenger revenue was off 9.6 per cent from the previous month, and 1.9 per cent less than in January, 1947. The freight revenue index (based on the 1935-39 monthly average as 100) was 228.4 for January, compared with December's 233.8, and 205.2 for January, 1947. The January passenger revenue index, at 231, compared with December's 255.4 and January, 1947's 235.4

More Service by Diesels

Bringing up to date its data on the use of Diesel-electric locomotives, the bureau presented a table showing that 12.37 per cent of the 1947 freight traffic, as measured in gross ton-miles of cars, contents, and cabooses, was handled by such locomotives, while coal-burning steam locomotives handled 66.98 per cent. The latter compares with a figure of 69.55 per cent for 1946, when the Diesel-electric proportion was 9.73 per cent; and with 79.66 per cent for 1941, when the Diesel-electric proportion was only 0.22 per cent. Oil-burning steam locomotives handled 18.59 per cent of the total ton-miles in 1947, and electric locomotives handled 2.05 per cent. Comparable figures for 1946 and 1941 were, respectively, 18.6 per cent and 2.11 per cent, and 17.78 per cent and 2.34 per cent.

Coal-burning steam locomotives propelled 63.72 per cent of the total passenger-train car-miles in 1941, but only 44.3 per cent in 1947, the Diesel-propelled proportion meanwhile rising from 7.75 per cent to 27.23 per cent. Most of that rise occurred in one year, between 1946 and 1947, the Diesel-electric proportion having been 15.28 per cent in 1946. In the same period, the coal-burning steam locomotive's proportion dropped from 52.05 per cent to 44.3 per cent. Oil-burning steam locomotives handled 21.99 per cent of the passenger-train car-miles in 1947, as compared with 26.19 in 1946 and 22.01 in 1941; electrics handled 6.48 per cent in both 1947 and 1946, and 6.52 per cent in 1941.

Diesel-electrics accounted for 11.42 per cent of total yard freight service locomotive-hours in 1941 as compared with 30.85 per cent in 1947. Meanwhile, the relative percentage for coal-burning locomotives dropped from 76.95 to 59.64 per cent. In yard passenger service, the Diesel-electric proportion of locomotive-hours rose from 20.22 per cent in 1941 to 43.52 per cent in 1947, exceeding the coal-burning steam locomotive's proportion for the first time. The latter dropped from 59.31 per cent in 1941 to 40.86 per cent in 1947.

Cost of Fuel

Another table showed that, as of December 31, 1947, Class I roads had 4,707 Diesel-electric locomotives in service. Roads in the Western district had 2,066, of which 1,382 were assigned to yard service and the remainder to road service. The Eastern-district total was 1,656 of which 1,199 were in yard service; and respective figures for the Southern region were 946 and 410. The Pocahontas-region roads had 39 Diesel-electrics, of which 26 were in yard service.

Data on quantities and prices of fuel purchased by Class I roads showed that the average 1947 cost of coal purchased f.o.b. mines was \$3.64, an increase of

80.2 per cent above the average 1941 cost of \$2.02. Meanwhile, the average cost of fuel oil was up 83.3 per cent, from 90 cents a barrel in 1941 to \$1.65 in 1947; electric current was up 19.4 per cent, from 0.814 cents per k.w. hr. to 0.972 cents; gasoline, 41.9 per cent, from 9.21 cents a gallon to 13.07 cents; and Diesel fuel, 64.3 per cent, from 4.46 cents a gallon to 7.33 cents.

To reflect fully the price changes, the bureau presented another table showing the average December fuel costs for the years 1941 to 1947. Among other indications those figures reflect the fact that the costs of fuel oil and Diesel fuel rose more rapidly in 1946 and 1947 than did the cost of coal, which had set the pace during the 1941-1945 period. The December, 1947, cost of coal purchased f.o.b. mines was \$4.11 per ton, 96 per cent above the December, 1941, cost of \$2.10 per ton. The cost of Diesel fuel was up 90 per cent, from 4.63 cents per gallon to 8.78 cents; fuel oil was up 113 per cent, from 93 cents a barrel to \$1.98; and electric current was up 23 per cent, from 0.825 cents per k.w. hr. to 1.013 cents.

Figures showing gross ton-miles and passenger-train car-miles per \$1 of fuel cost indicated that in 1947 Diesel fuel produced 2.2 times the number of gross ton-miles per \$1 of fuel expense as that produced by coal or electric current, and 2.7 times the figure for fuel oil. The corresponding ratios in the case of passenger-train car-miles in favor of Diesel fuel were: Coal, 2.0; oil, 1.9; electric current, 1.6. The bureau emphasized that these ratios "are based on overall averages and the situation on individual railways may vary greatly."



The B. & O.'s holly tree, located alongside the Washington-New York main line, occupies an acre of ground purchased by the railroad many years ago and surrounded by a steel fence for protection. Trackmen care for the tree

GENERAL NEWS

Transport Department Opposed by Railroads

Rejection of proposal also
urged by air and bus lines

Disapproval of S.1812, calling for the establishment of a federal Department of Transportation under a secretary of transportation, was urged by the railroad, air line and motor bus industries on March 23, as hearings on the measure were resumed before a subcommittee of the Senate committee on interstate and foreign commerce. As reported in *Railway Age* of March 20, page 98, the bill was favored by Director J. Monroe Johnson of the Office of Defense Transportation, who is also a member of the Interstate Commerce Commission. The bill is sponsored by Senator Capehart, Republican of Indiana.

The railroads' view on the proposed legislation were voiced by J. Carter Fort, vice-president and general counsel of the Association of American Railroads, who said he represented all Class I roads except the Chesapeake & Ohio; and J. M. Hood, president of the American Short Line Railroad Association. Also appearing were J. G. Scott, general counsel, National Association of Motor Bus Operators, and Robert Ramspeck, executive vice-president, Air Transport Association of America.

For Single Agency—According to Mr. Fort, the railroads are opposed to S. 1812, but, at the same time, are in accord with that objective of the bill which would provide a "greater degree of unification" of government regulation, control and promotional activities with respect to the several forms of transportation. "We believe," Mr. Fort said, "that transportation should be dealt with by the government as a single problem and with the purpose of developing an adequate, efficient and economical national transportation system in which all forms of transportation would receive fair and impartial treatment and in which each would perform those services which it is best suited to perform."

Mr. Fort said that the bill would not make any "substantial contribution" toward the effectuation of a sound transportation policy through the centralization of governmental responsibility. He also contended that it would give to the executive department a "certain degree of control or influence" over the I.C.C. and other independent agencies with respect to functions which, he said,

should remain "free of influence of that character and should remain immunized, so far as possible, from the impact of party politics." The railroads anticipate, he added, that much difficulty would be encountered in an attempt to divide the actual functions of the commission and other agencies into the categories described by the bill.

In elaborating on the carriers' contentions that there should be a greater degree of centralization of responsibility than now exists in the government, both as to the regulation and the promotion of transportation, Mr. Fort said that, in the railroads' judgment, there should be a "fair and impartial" regulation of all forms of transportation vested in a single independent commission and answerable only to Congress. "Such a commission could, we believe, . . . serve a valuable purpose with respect to the coordination of the government's promotional activities in connection with transportation," he continued. "It would be in a position to consider and appraise proposals concerning particular forms of transportation in the light of the broad public interest in an adequate and efficient national transportation system."

Why Omit Road Builders? — Mr. Fort observed that the bill would not transfer to the proposed department the functions of the Public Roads Administration or those of the Chief of Engineers, United States Army. The latter, he said, exercises "important function" with respect to federal aid to water carriers and in the construction and improvement of inland waterways. At the same time, he noted that the measure provides for the transfer of the Civil Aeronautics Authority to the new department, and, in that connection, pointed out that the C.A.A. has "important functions" with respect to federal expenditures in aid of air transportation.

The railroads' spokesman also asserted that there should be "consistency and centralized responsibility" in the regulation of rates and services. "This does not mean," he went on, "that the rates and practices of one form of transportation should necessarily be taken as a pattern or measure for the rates and practices of another form of transportation, but it does mean that consistent policies and standards should control the regulation of all forms of transportation. . . . The bill . . . would not make any considerable progress toward unification in the field of regulation, because the important regulatory powers of the . . . commission and of the Civil Aeronautics Board would continue to

be exercised by those agencies independently of the secretary of transportation. It is true the bill would give to the secretary some influence over these powers. . . but it would seem plain that an appropriate method of bringing about a centralization of responsibility over the regulation of all forms of transportation, including air, would be to place all regulatory authority in the same commission, and not to subject the powers of the several commissions to the influence of an executive department."

Mr. Fort also told the committee that the language of the bill is "so broad" and its meaning "so uncertain" that it is impossible to foresee the extent or form of influence which a secretary of transportation might exert upon the functions which the commission and other agencies are to exercise "independently." "The bill is unwise. . . in depriving the . . . commission of its status as an independent agency — an arm of Congress — and placing it within an executive department," he said. Mr. Fort further stated that the commission is constituted so as to afford reasonable assurance against "overnight" changes in long range policies. "In contrast," he continued, "the Department of Transportation, as a part of the executive branch, would be under the control of the dominant political party and its policies would be, therefore, subject to sudden and extreme reversals with changes of the administration."

Short Lines' Views—Mr. Hood told the committee that, while section 3 (b) of the bill undertakes to exempt the quasi-legislative and quasi-judicial duties of the commission from subservience to the secretary of transportation, past experience has convinced him that "this saving clause is wholly inadequate and that the results are certain to be inimicable to the public interest." Approval of the measure, he asserted, would both impair the efficiency and interfere with the independence of the commission.

According to Mr. Ramspeck, who noted that congress has rejected every similar proposal since 1890, enactment of S.1812 would impair the independence of the regulatory agencies, in addition to coloring their decisions with a political tinge and destroying their prestige so that difficulties would be encountered in getting competent men to serve on them. Among other things, he also described as "woefully inadequate" the presentation by Colonel Johnson in support of the bill.

Mr. Scott told the committee that (1)

it would be unwise (and unfortunate in result) to establish another executive department in the federal government; (2) the bill would fail to accomplish a high degree of coordination among the various existing agencies now regulating separate types of transportation; and (3) the powers which would be given to the secretary of transportation would "inevitably destroy" the judicial integrity of the existing agencies.

He said, however, that two major goals should be sought by legislation in order to cure "defects" in the existing system. In this connection, he declared that there should be uniform and coordinated economic regulation of all types of transportation by a single body in order to assure "fair and impartial" regulation of all modes of transportation. He also recommended the establishment by statute of an organization designed and staffed so as to permit "fulfillment of all of its duties and obligations in a prompt, efficient and effective manner."

Coal Burners' Mileage Cut by O.D.T. Order

Mine strike hits passenger service; freight order issued

Coal-burning, passenger-service locomotive mileage on the railroads was reduced 25 per cent. on March 22 under the requirements of an Office of Defense Transportation order which was issued as a result of the strike of coal miners. This action was followed by release of an order by the Interstate Commerce Commission's Bureau of Service, under the direction of Col. J. Monroe Johnson, as is the O.D.T., requiring a similar reduction in freight service next week.

Interstate Commerce Commission Service Order No. 811, effective from 11:59 p.m. March 30 until 11:59 p.m. April 30, unless otherwise modified, provides that "no common carrier by railroad shall operate a total daily coal-burning freight-service locomotive mileage in road-haul service in excess of 75 per cent of the total coal-burning freight locomotive mileage operated by it in road-haul service during an average day" in a specified test period, except that coal-burning freight locomotives used in the transportation of coal or the movement of empty coal cars en route to mines for coal loading may be operated in addition to the reduction thus ordered.

The test-period provision stipulates that the reduction ordered "shall be based on daily average mileage performed by such locomotives in the week ended March 6, 1948, in the movement of commodities other than coal and coal-mining derivatives and accessional services."

In curtailing operations, railroads are directed to give preference to food for human consumption; feed for animals or poultry; ingredients used in preparation of such food or feed; seeds for food or feed products; drinking water; ice; livestock and poultry; all fuels; medicines, drugs and surgical instruments; printing ink; newspapers and magazines; newsprint; films; toilet paper; paper eating utensils; chemicals for water treatment or sewage disposal or use by laundries or for sanitation or the manufacture of medicines; refrigerants for food; insecticides and fungicides; empty containers for the specified commodities; repair parts for essential transportation by rail, highway, air and water; supplies for public utilities; oil and gas heaters; and coal furnaces and repairs.

The order contains provisions for special or general permits, naming A. H. Gass, director of the O.D.T. Railway Transport Department as permit agent.

Railroads are directed to place embargoes or to take other necessary action to carry out the order.

Colonel Johnson explained that it will be his plan, if it becomes necessary, to cut freight service progressively in order to maintain at all times a 15-day supply of fuel coal, which could be used as a final emergency supply to move "bare necessities." He expressed the hope that the coal strike would be settled before it became necessary to proceed in that way. The O.D.T. director put the normal volume of coal production at 12,500,000 tons a week, and said the output had dropped to 2,000,000 tons in the seven days ended March 23.

The order curtailing coal-burning, passenger-service locomotive mileage is General Order ODT 69, and it became effective at 11:59 p.m. March 21. In addition to prescribing the overall cut it prohibits the substitution of other than coal-burning locomotives on the runs involved, and the operation of special trains if coal-burning locomotives are required. The latter is implemented by another provision which stipulates that the accumulation of mileage reduction in excess of 25 per cent may not be used for special-train operation. Also prohibited is the operation of circus trains or carnival trains. The 25 per cent reduction is based on operations on March 1, and there are provisions for special or general permits to meet specific needs or special circumstances.

The O.D.T. announcement said that the order was necessitated by "the exceedingly low railroad coal stocks, coupled with the stoppage in coal production." Railroad coal stocks, it also said, are now "considerably lower than they have been on previous occasions when stoppages in coal production have interfered with railroad operations."

First Cut 12,000 Tons Daily—It was stated at the Association of American Railroads that the railroads' daily consumption of coal has recently been about 300,000 tons. This included 49,000 tons

in passenger service, and thus it was estimated that the curtailment required by the order would result in a daily saving of about 12,000 tons. The A.A.R. also pointed out that the order leaves the details of meeting its requirements up to the individual roads, and thus the curtailment plans will be adapted to local conditions.

The strike is seriously affecting express service between Eastern cities and the Midwest and the West, the Railway Express Agency stated, as a number of important trains carrying express exclusively are steam-powered and operate on passenger schedules. Therefore, these express trains fall under the O.D.T. order.

It has become necessary to consolidate certain trains carrying express matter only, with the result that a considerable volume of this traffic will be delayed from 24 to 36 hours. The destination areas chiefly affected are: Omaha, Kansas City, Minneapolis, St. Paul, Des Moines, Denver and Pacific Coast points.

In compliance with the order, the railroads cancelled certain trains and otherwise readjusted passenger schedules effective March 21. The effect of the order, however, is less drastic than that of the order put out in November, 1946, because of the substantial subsequent increase in the use of Diesel-electric motive power for passenger trains. During 1947, 27.2 per cent of all passenger-train car miles were in trains propelled by Diesel-electric locomotives, compared with 44.3 per cent in trains powered by coal-burning steam locomotives.

A resume of the curtailments resulting from the order indicates that service on many roads — particularly in the West and Southwest — is virtually unaffected. Changes include the following:

Chicago & Eastern Illinois.—Night trains Nos. 94 and 97 between Chicago and Evansville, Ind., and the daylight "Cardinals" between Chicago and St. Louis, Mo., discontinued.

Chicago & North Western.—A total of 34 through trains have had their runs shortened, their frequency of operation adjusted (many daily runs were put on a tri-weekly basis), or have been discontinued entirely. None of the transcontinental or "400" streamliners are affected. Thirty weekday commuter trains have been withdrawn entirely.

Chicago, Burlington & Quincy.—One of three night trains between Chicago and St. Paul-Minneapolis, Minn., has been withdrawn and 12 local trains on various lines have been discontinued. No suburban trains are affected.

Chicago Great Western.—Day train service between Omaha, Neb., and St. Paul-Minneapolis, Minn., has been withdrawn and two night trains have been consolidated between Minneapolis and Hayfield.

Chicago, Milwaukee, St. Paul & Pacific.—Five Chicago-Milwaukee, Wis., trains have been withdrawn. Elsewhere secondary trains have been discontinued and the schedules of 16 others placed on a tri-weekly basis.

Chicago, Rock Island & Pacific.—Ten local trains and 16 non-rush-hour suburban trains have been taken out of regular service.

Denver & Rio Grande Western.—Six daily trains have been placed on an "except Sunday" basis and the schedules of 6 other trains have been reduced to tri-weekly.

Grand Trunk Western.—Nos. 5 and 6 between Chicago and Port Huron, Mich., and

night service between Muskegon, Mich., and Durand have been withdrawn.

Illinois Central.—Trains withdrawn include the "Land O' Corn" between Chicago and Waterloo, Ia., the "Sinnissippi" between Chicago and Freeport, Ill., the "Night Diamond," between Chicago and St. Louis, Mo., the "Iowan" between Fort Dodge, Ia., and Sioux City, and eight secondary trains elsewhere.

Minneapolis, St. Paul & Sault Ste. Marie.—Six daily trains have been placed on a tri-weekly basis.

Wabash.—The "Blue Bird" between St. Louis, Mo., and Chicago and six shorter runs have been discontinued.

Union Pacific.—Two trains have been discontinued and the runs of two others shortened. Before the O.D.T. order was effective, George F. Ashby, president of the Union Pacific, had ordered that coal-burning locomotives be replaced with oil burners to "the greatest possible extent" and declared that "if deemed necessary, the use of Diesels will be extended to the Eastern district." "I had not intended Dieselization of the Eastern District unless forced to do so," Mr. Ashby stated. "But it is becoming more and more evident that I will have to do so, if these miners insist on being led by persons having neither their own good nor the welfare of the country at interest. It is upon such docile followers of irresponsible leaders that the enemies of this nation and its form of government base their hopes."

Atlantic Coast Line.—Twenty trains have been taken out of service.

Boston & Maine.—Eighty-three weekday trains (including 8 Saturday trains), and 76 Sunday trains have been discontinued.

Baltimore & Ohio.—Trains suspended total 23.

Central of New Jersey.—Trains annulled include 96 daily and 59 weekend only.

Chesapeake & Ohio.—Forty-eight trains have been curtailed in whole or in part.

Lehigh Valley.—Seven trains cancelled.

New York, New Haven & Hartford.—Trains withdrawn include 47 Monday-through-Friday, 45 Saturday only and 40 Sunday only.

New York Central System.—Trains discontinued total 169, which result in a reduction of 23,563 passenger-train-miles.

Pennsylvania.—Forty-five trains have been completely discontinued and 11 daily trains are now operated tri-weekly.

Richmond, Fredericksburg & Potomac.—The streamlined "Old Dominion," in both directions, has been cancelled.

Seaboard Air Line.—Three daily round trips annulled, thus eliminating 2,960 passenger-train-miles.

Southern.—Thirty-two trains laid off.

arrangements into conformity with legislation (Public Law 395) enacted late last year to authorize President Truman to encourage voluntary industry agreements for the allocation of scarce materials and to extend immunity from anti-trust laws to participate in such agreements. The President delegated that authority to various government officials, the part dealing with the steel and pig iron allocations going to the secretary of commerce.

To Formalize Understanding.—The four western railroads, which joined the Car Institute in expressing misgivings, were the Chicago, Milwaukee, St. Paul & Pacific; Atchison, Topeka & Santa Fe; Chicago, Burlington & Quincy; and Chicago, Rock Island & Pacific. These misgivings were expressed despite assurances from the proposed plan's authors and sponsors that they had merely undertaken to embody in it the existing allocation arrangements. Moreover, Francis A. Silver, general counsel of O.D.T., warned that continuance under the present set-up "is not practicable." Mr. Silver explained that the present arrangement is covered by an anti-trust "clearance" from the attorney general which terminates April 1. He went on to say that the term of this clearance will not be extended, because the attorney general takes the position that the legislation under which the proposed agreement was framed has become the "exclusive" method for obtaining anti-trust immunity.

As originally written, the proposed agreement would have covered the allocation of pig iron as well as steel. However, the pig-iron phase has been set aside for the present, the interested parties having agreed that there is no need at this time for overall allocations of pig iron, and that any special cases can be handled on a spot-aid basis.

For 10,000 Cars a Month.—With respect to steel, the proposed plan provides that the producers will make available, on an average monthly basis, sufficiently steel of the various types necessary to permit the construction of 10,000 new freight cars monthly and "for the repair of railroad rolling stock in line with the program presented by the Office of Defense Transportation." The workings of the proposed plan are then set out in detail, the participation of O.D.T. being indicated at every stage. The reporting requirements were one phase which the objectors especially disliked. Those requirements would not only commit participants to furnish various specific reports to O.D.T., but would also reserve for the latter "the right to request the participants . . . to submit such individual reports from time to time as it may consider appropriate."

Before the formal hearing got under way, the assembly was addressed by Senate Clyde Reed, Republican of Kansas, who last year headed the Senate interstate commerce subcommittee that

brought together representatives of the car builders, the steel industry, O.D.T. and the railroads for conferences which resulted in agreement on the present allocation plan. The proposed plan on which the hearing was being held, as Mr. Reed read it, "puts into language the program worked out by the Senate committee and O.D.T." Similar comment came from R. L. Glenn, director of O.D.T.'s Division of Manpower and Materials, who said the O.I.C. proposal "is not a new program," but "is designed to continue the program which is now being participated in on a voluntary basis." And A. K. Tigrett, chief of O.I.C.'s Transportation Division, said the proposal was an undertaking to "formalize" the existing arrangement and "give it some permanence."

The first industry presentation was made by J. H. Aydelott, vice-president, Operations and Maintenance Department, Association of American Railroads, who stated that the 10,000-car monthly production of new cars, as contemplated by the proposed agreement, should be regarded as a "rock bottom minimum." In Mr. Aydelott's opinion, 12,000 cars would be a more "conservative" monthly goal. As to the proposed plan, the A.A.R. vice-president emphasized that he was not in a position to commit any individual road. He then went on to observe that the plan's reporting requirements seem to "go beyond" those of the present set-up.

Felton's Opposition.—Speaking for the Railway Car Institute, President S. M. Felton said that the present allocation plan "has received the cooperation of all parties in interest and has functioned so effectively that production virtually attained last year the 10,000-car goal." He added that during 1947 production in the contract shops "more than tripled, despite shortage of materials and other contingencies faced by all industries during the postwar period." In view of the "increasing success" of the present program "as it is now operating with the full cooperation of and with O.D.T., with procedures established after painstaking effort," Mr. Felton asked why that program should be discarded and an "untried plan" substituted.

"The discussion of the anti-inflation act in Congress," he continued, "clearly indicates that it was the intention of Congress that any agreement made under the act must be entirely voluntary and that no penalties, legal or otherwise, were to be imposed upon any person or industry because of a determination to refuse to join in or remain a party to any voluntary agreement under the law. The proposed plan could produce a very difficult result. In actual operation it means the rationing of steel to car manufacturers, and a manufacturer who withdraws from the plan might suffer the most drastic of all penalties in the complete loss of steel supplies."

Steel-Allocation Plan Draws Some Opposition

Misgivings expressed by Car Institute and 4 western roads

The American Railway Car Institute and four western railroads are opposed to the proposed "voluntary" agreement which has been formulated by the Department of Commerce's Office of Industry Cooperation for the allocation of steel for use in the freight car building and repair program. The opposition was expressed at a public hearing at Washington, D. C., on March 19 before Earl W. Clark, chief of O.I.C.'s Departmental Mobilization Staff.

The proposed plan would supplant the voluntary allocation arrangements worked out last year by the Office of Defense Transportation and the steel industry. It is designed to bring such

In closing Mr. Felton said he anticipated that, as a result of the hearing, the interested government agencies would consider modifications of the plan. "Until that is done," he added, "the members of the American Railway Car Institute desire to withhold any announcement of their acceptance of the plan. They want to see it first in final form." At the suggestion of Hearing Officer Clark, Mr. Felton agreed to submit to O.I.C. a supplementary statement which would set out the institute's objections in specific form. Meanwhile, Wallace N. Barker, executive vice-president of the Pullman-Standard Car Manufacturing Company, had appeared briefly to register that company's concurrence in the statement made by Mr. Felton.

Buford Balks at Reports—C. H. Buford, president, president of the Milwaukee, said that his road objected to signing any agreement which would give the interested government agencies the "blanket authority" to obtain reports which is contained in the O.I.C. proposal. Thus, as Mr. Buford put it, the Milwaukee "wouldn't want to participate unless we had to" in order to obtain steel.

G. H. Minchin, vice-president (operation) of the Santa Fe, said that road was concerned with respect to "two or three things" about the proposed agreement. He listed first the "possibility" that the Santa Fe might be forced to obtain its steel from "outside connections" rather than from suppliers on its lines with which it prefers to continue dealing. Mr. Minchin also said that the Santa Fe is among those concerned about the "rather voluminous" reports that would be called for. He added that his road is "very anxious" to continue arrangements like the present program, and hopes the proposed agreement "won't upset it."

The opposition of the Burlington and Rock Island was expressed in a joint statement made by Eldon Martin, general solicitor of the former. The statement asserted that these two roads regard the proposed agreement as "another N.R.A." They do not believe that "any such government controls" are "necessary or advisable," and think they "should be avoided because they are contrary in principle to the free enterprise system." Each of these roads, the statement said, "expects to obtain all the steel necessary this year for car building, car repairs, track and other purposes, if the production, sale and purchase of steel is left free from control or regulation by government officers or industry committees, which operate to regiment the car-building business or restrain trade in the production or use of steel for car building."

Concern for Railroad Shops—Meanwhile, the statement had described the Burlington's car-building facilities as a "modern, production-line . . . plant, with adequate facilities and equipment,

a force of experienced men and efficient supervision, with ample capacity to build 3,050 freight cars which it has programmed for construction in the year 1948." In that connection the Burlington is concerned that the proposed agreement's steel-allocation plan, to the extent it is based upon past production records, would deprive it of the use of these shops which it has "recently enlarged." The Rock Island is not presently engaged in building its own cars, but it believes the proposed plan would "adversely affect its interests as a purchaser of freight cars built by others."

"There is no assurance," the statement also said, "that all available steel . . . will not be allocated, or given in preference, to those railroads and car builders which subscribe to the plan, thereby cutting off the normal sources of steel . . . of the Burlington and Rock Island, and through which each of them otherwise would be able to purchase its requirements . . ."

"Immunity from the anti-trust laws referred to in the (legislation) of December 30, 1947, is limited to actions of government officers and industry committees pursuant to voluntary plans. The (legislation) does not contemplate that railroads which do not voluntarily agree to the plan shall be coerced into it to avoid having their supply of steel cut off and their shops closed."

Unions Want In—Fred N. Aten, president of the Railway Employees Department, American Federation of Labor, filed a statement advocating increased allotments of steel for production of cars in railroad shops. William Green, president of the A.F. of L. took a similar position in a letter which was read into the record. Mr. Green also suggested that the proposed plan's administrative procedures be amended to provide for "full consultation" with interested labor unions.

E. F. Lacey, executive secretary of the National Industrial Traffic League, said that the league "wholly approves the proposed voluntary agreement," but it is of the opinion that the "public interest" requires a raising of the monthly target from 10,000 cars to 14,000 cars. In leading up to that proposal, Mr. Lacey had expressed the league's concern "over the growing inadequacy of the nation's car supply to meet the needs of commerce." He also took occasion to "emphasize the vital importance of replacing as promptly as possible antiquated freight cars which have long since served their usefulness."

Commenting on the presentations, Mr. Glenn said again that the proposed agreement was designed to follow "as closely as possible" the present allotment plan as operated by O.D.T. However, he was "not in a position to say" what would happen to some company which did not subscribe to the agreement—that is a matter that "will be decided by persons higher than those

in this room." Meanwhile, Mr. Glenn did say that he could "definitely" state that there would be some "minor clarifying amendments" to the plan before it is submitted in final form to prospective participants.

Cut in Unemployment Insurance Tax Urged

Railroads favor, unions oppose, sliding-scale basis

The House committee on ways and means held public hearings March 18 and 19 on a bill introduced by Representative Simpson, Republican of Pennsylvania, to amend the Railroad Unemployment Insurance Act by placing the taxes collected thereunder on a sliding-scale basis which would immediately reduce the levy (paid entirely by the railroads) from 3 per cent to ½ per cent of the taxable payroll. The bill was supported at the hearings by representatives of the Association of American Railroads and Frank C. Squire, railroad management's representative on the Railroad Retirement Board, while opposition came from representatives of railway labor unions and D. B. Schreiber, associate general counsel of the Retirement Board, who said he spoke for the majority of the board, i.e., the labor representative, J. G. Luhrsén, and the "public" member, Chairman W. J. Kennedy.

Crosser Would Spend More—In setting up its sliding-scale tax plan, the Simpson bill, which is H.R.5711, would make no change in the Unemployment Act's present benefit provisions. Meanwhile, Representative Crosser, Democrat of Ohio, who sponsored the 1946 amendments which added the present sickness and maternity benefits, has introduced H.R.5875 to increase the act's daily-benefit rates by 25 per cent. Under this Crosser bill, the rates, which vary with the compensation received by beneficiaries during their so-called base years, would range from \$2.20 to \$6.25 per day, as compared with the present range from \$1.75 to \$5.

The sliding-scale tax plan proposed in H.R.5711 would fix the levy at ½ per cent of taxable payroll while the balance in the Railroad Unemployment Insurance Account in the Treasury remains at \$350,000,000 or more. When the fund was below \$350,000,000 but not less than \$300,000,000, the tax would become 1 per cent, and so on until the 3 per cent rate was restored when the fund fell below \$150,000,000. Preliminary to the ways and means committee's hearings, Representative Simpson had discussed the measure in a statement which he inserted in the appendix to the March 15 issue of the Congressional Record.

Sliding-Scale Plan—"The purpose of

this bill," he said, "is to put the unemployment insurance tax paid by railroad companies on a merit-rating or sliding-scale basis, conditioned on the size of the reserve fund balance each year, without in any respect changing the benefits now provided. This would extend to the railroad industry substantially the same treatment accorded every other employer in the country with respect to unemployment under the various state and federal social security systems."

Appearing at the hearings in support of the measure, J. Carter Fort, vice-president and general counsel of the A.A.R., told the committee that the bill would remedy a "long-standing injustice." In this connection, he observed that the present 3 per cent rate has been the same since the unemployment insurance system became effective July 1, 1939.

"These excessive taxes upon the railroads have, in a period of less than nine years, resulted in the accumulation of an unemployment surplus reserve fund of more than \$900 million — and the fund continues to grow with every quarterly tax collection from the railroads," Mr Fort said. "The fund is already so hugely swollen that it has lost all relationship to any conceivable need. But the railroads are still being taxed at the rate of about \$145 million a year further to build up this reserve fund which is many times as great as necessary fully to protect all benefit payments."

In observing that employees do not contribute anything to the support of the system, Mr. Fort related that the reserve surplus fund had reached the "staggering amount" of \$858 million on July 1, 1947. During the system's first eight years of operation, he said, the cost of all benefits, including the cost of administration, averaged about \$17,500,000, or approximately one-sixth of the taxes.

"On December 31, 1947," he continued, "the surplus fund had grown to \$914 million, or \$56 million more than it was on July 1. The estimated figures for the current fiscal year . . . are arresting. The 3 per cent tax paid by the railroads will produce for that year about \$145 million. The interest on the reserve fund will produce about \$17 million additional, making the total receipts more than \$160 million. Contrast that with the estimated disbursements. Based on experience for the first eight months of the fiscal year, which will end June 30, it is estimated that the benefit payments, both for unemployment and sickness, will be about \$56 million and that the cost of administration will be about \$5 million, making a total expenditure of between \$60 million and \$65 million."

Mr. Fort said that the railroads are paying this "enormous tax" and building up this "useless and unnecessary surplus reserve" at a time when they

need to have money spent on improvements to make rail transportation better and more economical and at a time when railroad earnings are "far from adequate" in spite of four freight rate increases during the past two years. "Vast amounts of money are being withdrawn from the railroad industry for no purpose when that money is badly needed in the industry," he said.

"Under the graduated tax scale," he continued, "this bill provides a minimum rate of one-half per cent which would produce about \$24 million a year. . . and the interest of the fund would produce another \$17 million so that the total income would, at the outset, be about \$40 million against an expense of \$60 million or \$65 million. This would result in a gradual reduction of the reserve fund until it reached \$350 million and during that time the minimum tax would apply . . . Even if it should be assumed that the annual disbursements under the railroad unemployment insurance system would be somewhat higher than the \$60 million to \$65 million which is estimated for this fiscal year, the minimum rate of one half per cent would continue for perhaps 12 or 15 years. When the fund dropped below \$350 million, the increased tax rates under the graduated scale would automatically go into effect and an ample reserve fund would thus be maintained."

Penalized \$300 Million a Year—Mr. Fort also told the committee that the railroads are now paying taxes at about the rate of \$280 million yearly toward support of the railroad retirement system in addition to the \$145 million annually to support the railroad unemployment insurance system. The accumulated total, he said, is nearly \$300 million more per year than the railroad industry would pay if it were taxed on the same bases for retirement and unemployment insurance as are other industries subject to the Social Security Act.

Presenting a 22-page statement, Dr. J. H. Parmelee, vice-president of the A.A.R. and director of its Bureau of Railway Economics, elaborated on the statistics offered by Mr. Fort. Among his conclusions was one to the effect that a graduated scale of tax rates, such as is provided in H.R.5711, would support the unemployment insurance system "with at all times an adequate but not needlessly over-financed reserve fund." Following a discussion of the so-called "experience rating" with respect to unemployment insurance as applied by many states to virtually all industries under the social security system, Dr. Parmelee said that "manifestly, some plan of experience rating has long since been justified for application to the railroad system." "It is, in fact," he added, "greatly overdue." He also told the committee that H.R.-5711 would offer the railroads an incentive to keep employment conditions as

stable as possible. "It would stimulate them to assist the Railroad Retirement Board to help police the claims for benefits, and thus reduce both the amount of benefits and the cost of administration," he went on.

According to Dr. Parmelee, the unemployment insurance system would operate until 1967 before the reserve would be reduced to \$350 million. "From that time on," he said, "an increase in the tax rate would probably be necessary, and might rise to, but not above, an average of around 1½ per cent. Stabilized at such a level, the reserve would never be less than three times as great as the annual requirements." The B.R.E. director added that reducing the tax rate to one-half per cent would mean an annual saving of approximately \$120 million a year to the railroads. He emphasized, at the same time, that the provisions of H.R.5711 afford "complete financial protection to the railroad unemployment and sickness system."

R.R.B. Member Squire said that the present 3 per cent tax is a "plain case of overcharging" in view of the "tremendous fund" accumulated to date. "The tax could be suspended entirely and we could still continue to pay all benefits for unemployment and sickness under the act for 10 or 15 years on the money already accumulated," he added. According to Mr. Squire, there was, as of March 12, \$933,900,000 in the Railroad Unemployment Insurance Administration Fund.

Brotherhoods' Opposition—In addition to the board's associate general counsel, Mr. Schreiber, the opposition witnesses were Harry See, national legislative representative, Brotherhood of Railroad Trainmen, and L. P. Schoene, who represented the Railway Labor Executives Association, the American Federation of Labor and the Brotherhood of Locomotive Firemen and Enginemen.

Speaking on behalf of the R.R.B. majority, Mr. Schreiber described as "invalid" the assumption that the benefits payable under the act are already adequate. At the same time, he said that the extent to which benefits should be increased under the act within the existing 3 per cent rate and "still leave a sufficient margin of safety" is now the subject of a study being made.

The R.R.B. also holds, Mr. Schreiber continued, that the bill is premature because it proposes to consider tax rates before any consideration is given to benefit rates and because "no adequate information" is as yet available as a basis for tax reduction. The board, he went on, also is opposed to the institution of experience rating with respect to unemployment insurance, adding that "whether or not experience rating is properly applicable to unemployment insurance, it is clearly inapplicable to days of sickness."

"It is true," he said, "that the wage

increases have increased total payrolls on which contributions are based, and, therefore, have increased the reserve in the account. But these same wage increases will increase the total amount of the benefits paid, particularly in future years, due to the greater earnings in a base year. Further, the increase in wage rates has created a disparity between benefit rates and wage rates. For large number of employees, benefit rates are substantially lower in relation to wages than they were before."

According to Mr. See, H.R.5711 is an attempt on the part of the A.A.R. to "use" the Congress to "assist the railroad industry in expanding its profits . . . to the extent of \$120 million a year." The B. of R.T., he said, regards H.R.-5711 as "untimely" because of the increases in cost of living and with the legislation (H.R.5875) pending in Congress to increase the benefits under the Railroad Unemployment Insurance Act by 25 per cent. "We think we have been lax in not coming to Congress before this for an increase in benefits, and we will certainly support any such legislation," he added.

Mr. See said that, during the "few years" that the legislation has been in effect, there have been no tests made that would warrant such a reduction "because most of the years have been years of abnormal employment and high wages, with little or no unemployment." The proposed reduction in taxes, he said, would deplete the fund during the time of large payrolls, adding that the earnings of the carriers would be reduced "when a depression came on and many men were out of employment."

Mr. See said he doubted that a tax reduction would result in any benefits to the public or in lower freight and passenger rates and higher wages for railroad employees. "Certainly," he stated, "the Interstate Commerce Commission took into consideration this particular tax . . . at the time the various increases in rates were granted . . . over the past few years, and we know that in wage movements — always and without exception — the railroads emphasize the benefits to employees in this and similar acts of Congress and the amount of money it costs them in the way of payroll taxes, and no doubt it has had some effect in lessening the amount of increases in wages that would be granted. So, the carriers benefit in two ways from this tax — first, they are granted increases in freight rates to pay the tax, and, second, the employees do not receive in wages what they might have received were it not for the fact that the railroads are required by law to pay this tax."

Challenge Parmelee's Figures—Mr. Schoene questioned the "technical jurisdiction" of the committee to hear testimony and report on the bill and "suggested" that it refer the measure to the House committee on interstate and

foreign commerce, which, he said, has handled all previous legislation dealing with railroad employee benefits. The committee, however, held that it was authorized to handle the bill under the provisions of the Reorganization Act of 1946.

Mr. Schoene described as the "new look in statistics" the evidence submitted by Mr. Fort and Dr. Parmelee, adding that "it conceals much more than it reveals." The "assumptions" of Dr. Parmelee, he said, were erroneous in that the A.A.R. officer failed to take into account that benefit provisions were revised in 1940 and 1946 and because the current fiscal year is "abnormal" in so far as the payment of benefits is concerned. The statistical evidence of the railroad witnesses, he contended, was based largely on "general conclusions" and also was erroneous with respect to anticipated unemployment insurance disbursements.

Asserting that it has not been shown that any reduction in the present 3 per cent tax rate is warranted, Mr. Schoene held that surplus funds in the unemployment insurance account should be applied, in the form of larger benefits, toward combating inflation. Declaring that the fund more easily can be retained than rebuilt, he said that the now "deficient" tax rate should not be reduced until action has been taken on Mr. Crosser's so-called "cost of living" measure, H.R.5875. The latter bill, he said, would provide more adequate monetary benefits in terms of present-day purchasing power. If available funds permit, he went on, there should be larger increases in the benefits.

Mr. Schoene further contended that the provisions of the unemployment insurance act are not discriminatory against the railroad industry. In this connection, he said that the payroll taxes have been used by the railroads as a basis for obtaining increased freight and passenger rates. At the same time, he also told the committee that many of the 2,250,000 railroad employees eligible to receive benefits are unaware of the availability of such benefits and that the present unemployment insurance fund includes \$123 million transferred from state social security accounts, thereby reducing by approximately 14 per cent the alleged contributions made by the railroads to that account.

Proposed New Jersey Railroad Tax Legislation

When the New Jersey State Constitutional Convention drew up a new constitution last summer it included a tax clause which would greatly increase the rates on second-class railroad property. Recognizing the limits to the capacity of the railroads to pay higher taxes, a memorial was directed to the legislature to reconsider the entire railroad tax law and to take such action as would not impose a harmful and

ROCK ISLAND "ROCKETS" GROSS \$10 MILLION IN 1947

Fifteen Diesel-powered "Rocket" trains operated by the Chicago, Rock Island & Pacific accumulated a total of 3,680,673 train-miles during the year 1947, and earned a total gross revenue of \$10,054,673.

The 10-car "Rocky Mountain Rocket," operating between Chicago and Denver, Colo., and Colorado Springs grossed \$3.39 per train-mile, the highest per-mile earnings for any of the 8 "Rocket" runs. Second in train-mile earnings was the "Peoria Rocket," which earned \$3.18 per mile on its two daily round trips between Chicago and Peoria, Ill.

The "Corn Belt Rocket," operating between Chicago and Omaha, Neb., produced an average train-mile revenue of \$2.75 from the time of its inauguration on November 23, 1947, to the end of the year.

unfair total tax burden upon the railroads.

A hearing on the bill now under consideration by the state legislature was held on March 16. It was opened by a statement by President Glenn Gardiner of the State Chamber of Commerce, pointing out the excessive taxation to which the railroads had been subjected and urging that they be permitted to earn sufficient revenues to insure safe operation and adequate service to the public. David I. Mackie, general counsel of the Delaware, Lackawanna & Western, speaking for the Associated Railroads of New Jersey, showed conclusively that the railroads of New Jersey are taxed far beyond those of any other state, that instead of increasing the taxes or keeping them on the same basis as last year, they should be greatly reduced.

The railroads, however, realizing the serious fiscal problems with which the state administration is now confronted, will not this year press for a reduction from last year's taxes, although they will be forced to come back for relief in the near future; they cannot much longer continue to pay more in taxes to the state than they actually earn within the state. Mr. Mackie pointed out that in the proposed bill the total tax, which would yield about \$16 million, or the same as in 1947, would not be fairly divided between the different railroads in the state. Some would have a reduction of taxes over 1947 and others would have an increase. It was therefore strongly urged that the bill be amended to eliminate this inequitable distribution.

Mr. Mackie was supported by Chief Executive Officer E. T. Moore of the Central of New Jersey, Vice-President R. C. Morse of the Pennsylvania, Vice-President and General Counsel J. Aronson of the New York Central, and former State Senator Roy V. Wright. A. F. Metz, president of the New Jersey

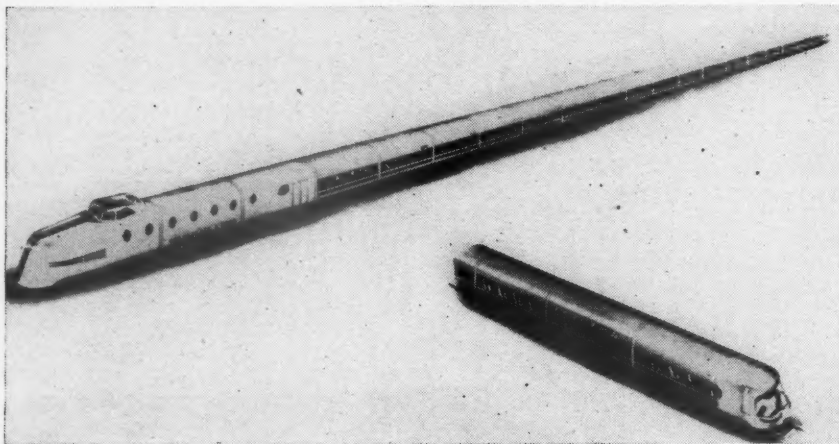
Taxpayers' Association, emphasized the importance of giving fair treatment to the railroads; he was critical of the heavy burden placed on them. The only other objections to the bill were made by the New Jersey State League of Municipalities. Under the new constitution and the proposed bill, the municipalities will be permitted to tax the second-class railroad properties on the same basis as other property rather than on the flat \$3 rate. The taxes will be paid direct to the state, which will recompense the municipalities, but will reduce taxes on the "main stem" railroads to offset the increased taxation on second-class properties.

C. & O. Is Developing A Novel Lightweight Train

A lightweight train, based on a new concept of rolling-stock design which it is said will be capable of a speed of 150 miles an hour, is now in process of development by the research department of the Chesapeake & Ohio, according to an announcement made by the railroad on March 19. The features which are expected to permit high speeds are the use of small car-body units with a lower center of gravity, each carried on a single pair of wheels at the rear end, with the front end articulated to the rear of the preceding unit. According to the announcement, each body unit will be 30 ft. in length and will be carried on a single pair of 28-in. wheels with rubber centers. Both the floor and the roof will be lower than present passenger cars carried on swivel trucks and the bodies will be 6 in. wider inside. The center of gravity will be lower by about 18 in.*

Because of the low floor a redistribution of the equipment usually supported under a passenger-car body is being

* These cars are an adaptation of the equipment of the Diesel-powered train developed in Spain by Senor Alejandro Goicoechea and financed by Patentes Talgo, S.A. Senor Goicoechea was at one time chief engineer of the Ferrocarriles de la Robia and technical advisor to the Board of Railway Rolling Stock. A brief description of the train appeared on page 896 of the December 9, 1944 *Railway Age*.



Lightweight train is being developed by the C. & O. Body units are articulated and each is carried on one pair of wheels

worked out. This equipment will be carried on a head-end "mother" unit which will be a part of the locomotive and will provide water, electricity, and air conditioning for the entire train. Couplings which will bring the center sills in contact to resist impact will also bring about automatic connection of the various conduit required between the body units.

A wheel suspension with "piston activators" is under development, designed to tilt the cars into the curve rather than outward as is the case with cars of customary design. The train is expected to weigh only about one quarter as much per passenger as conventional passenger trains.

A novel motive-power unit matching the characteristics of the train, according to the announcement, may be some form of gas-turbine or internal-combustion locomotive.

American Railroads Represented At Havana Gathering

William T. Faricy, president of the Association of American Railroads, Dr. Julian Duncan, transportation economist of the Interstate Commerce Commission, and Seymour T. R. Abt, of the Office of International Trade, Department of Commerce, will serve as observers for the State Department at the Pan-American Railway Congress in Havana, Cuba, next week. While attending the Congress Mr. Faricy in his capacity as a railroad officer will present two papers — one dealing with the American railroads in the two world wars and the other on gages of railroads in the United States.

Bulwinkle Bill Opposition as Seen by MacMillen and Jackson

The denials by Vice-President J. Carter Fort of the Association of American Railroads of allegations by President William C. MacMillen, Jr., of the Federation for Railway Progress concerning the A.A.R. booklet, "Fact to Face Across the Table," dealing with the Bulwinkle bill to stay the operation of the anti-trust laws with respect to car-

rier joint actions sanctioned by the Interstate Commerce Commission, have been termed "totally unsatisfactory" by Mr. MacMillen in a reply made public March 24. The gist of the F.R.P. officer's first assertions, and of Mr. Fort's answer, was reported in *Railway Age* of March 20, page 94.

"In the first place," Mr. MacMillen's reply stated, the A.A.R. vice-president's "citation from the report of the House committee on interstate and foreign commerce of July 25, 1947, refers to 'virtually unanimous support' which is quite a different thing from the 'unanimity of support' reported in your [A.A.R.] booklet.

"Secondly, the fact that Colonel J. Monroe Johnson has issued an erroneous statement does not make it sacrosanct. It is still misinformation, and I suggest that you are responsible for your own statements.

"Thirdly, you are, I am sure, well aware that the Chesapeake & Ohio has opposed the Bulwinkle bill," the F.R.P. president continued. That road's president, Robert J. Bowman, in an January 14 speech referred to by Mr. Fort, said, according to Mr. MacMillen's reply, "We (of the C. & O.) do not think any additional legislation covering such agreements is necessary or desirable. . . . We have not supported the Bulwinkle bill or Senate bill No. 110."

"The misstatements in your booklet," Mr. MacMillen's reply to Mr. Fort concluded, "are typical of the attitude which has caused the Association of American Railroads to do so much harm to our railroads in the eyes of the general public. I again request you to correct these misstatements of fact publicly."

Meanwhile, however, one C. & O. stockholder, George S. Jackson of 230 West End avenue, New York, who has challenged that company's management on several recent occasions — as reported in *Railway Age* of January 31, page 50, and March 6, page 60 — had written to William T. Faricy, president of the A.A.R., to declare that "informed C. & O. stockholders favor the Bulwinkle bill." Copies of this letter were sent to the Interstate Commerce Commission and the Office of Defense Transportation.

Calling the F.R.P. an "avowed anti-railroad organization," Mr. Jackson asserted that C. & O. stockholders did not authorize their management to contribute to or support the federation. . . . The C. & O. stockholders did not authorize the federation or its President MacMillen to speak for them in opposing the Bulwinkle bill or any A.A.R. activity in behalf of the railroad industry."

Apart from the Department of Justice, Mr. Jackson asserted, "when one eliminates the small groups whose heads are under [C. & O. Chairman] Young's spell or domination, there is no opposition to the Bulwinkle bill."

Employee Furloughs Increase As Coal Strike Continues

More than 36,000 railroad employees had been furloughed as a result of the coal strike and the Office of Defense Transportation's order to reduce steam-powered passenger haulage when *Railway Age* made inquiries on March 23. Many roads reporting said the full impact of the situation had not yet been felt and that there would be large lay-offs if the strike continued another week. The table lists the reporting railroads and the approximate number of men already furloughed by each. In some instances, where the information was given, the direct cause of the lay-offs has been indicated.

Railroad Employees Furloughed in Early Stages of Miners' Strike

A. C. L.	75*
B. & O.	6,000
B. & M.	50*
C. of N. J.	500
C. & O.	12,490
C. B. & Q.	300
C. I. & L.	30
D. L. & W.	20
D. & R. G. W.	152
Erie	95
I. C.	2,000
L. & N.	1,500
M. P.	305
N. Y. C.	3,000**
N. & W.	4,250
N. P.	10
Reading	490
S. A. L.	34*
Southern	3,500
Virginian	371
Wabash	178
Various	468

*Passenger train service employees only.
**Including 400 men in passenger train service.

Emergency Board Created

President Truman issued a March 18 executive order creating an emergency board to investigate a dispute between the Terminal Railroad Association of St. Louis and certain of its employees as represented by the Brotherhood of Locomotive Engineers, the Brotherhood of Locomotive Firemen & Enginemen, and the Brotherhood of Railroad Trainmen. The dispute involves grievances with respect to which the National Railroad Adjustment Board would normally have jurisdiction.

Senate Committee Ends B.&O.-R.F.C. Inquiry

The Senate committee on banking and currency has closed the record on its investigation of that phase of the Baltimore & Ohio's 1944 debt-adjustment plan which involved the extension until 1965 of some \$80 million in loans from the Reconstruction Finance Corporation. The committee's chairman, Senator Tobey, Republican of New Hampshire, was the member most interested in the investigation which included a series of public hearings last year.

The committee's concluding action was a brief review of the inquiry which was included in its recent report on a proposed bill, S.2287, to extend the life of R.F.C. until from June 30, 1948, un-

til June 30, 1960, the new term to be under the provisions of a revised R.F.C. Act. Among other observations, the committee's statement of the B.&O. case noted that the allegations of "fraud" by a dissenting security holder have been found unsupported by the federal district court which had the adjustment plan before it; and that the Supreme Court has refused to review that determination. The statement went on to say:

"Since the adjudication of the . . . court . . . has considered and passed upon the specific charges of fraud considered in the Senate banking and currency committee hearings, the committee believes that no further action regarding the B.&O. loan transaction can be appropriately taken by it and accordingly declares that the hearings on this subject be closed with his report of the proceedings."

Lackawanna Strike Called Off

The differences between the Delaware, Lackawanna & Western and the Brotherhood of Locomotive Engineers and the Brotherhood of Locomotive Firemen and Enginemen with regard to individual grievances have been adjusted by agreement and the strike threatened for March 26 was cancelled, it was announced this week.

Railroads to Intensify Scrap Collection Efforts in April

American railroads will observe April 5 to April 10 as "Railroad Scrap Collection Week" in an effort to help increase production of steel, badly needed for the construction of new freight and passenger cars, locomotives and other purposes, W. T. Faricy, president of the

Railroads always have been one of the largest and most dependable sources of purchased scrap. They produce normally about 3,500,000 to 4,000,000 tons annually, or about 20 per cent of the total scrap. Because the war interrupted the production of durable goods, however, the amount of available scrap has not been as great proportionately as formerly.

Subsidy Taxpayers Taken for Ride "They Don't Get"—Ashby

A passenger or shipper patronizing a subsidized carrier pays his transportation charge and may think he has a bargain, until he finds, covered up in his taxes, the amount he has paid toward the subsidy, George F. Ashby, president of the Union Pacific, declared in an address at the annual dinner of the Pacific Railway Club in San Francisco on March 11. The non-passenger and non-shipper, he said, are "taken for a ride they don't get," for, buried in their taxes, also is their contribution to the subsidy. Also, buried in the taxes of the non-subsidized carrier, which faces unfair competition, he added, is the amount it contributes to the subsidy.

Continuing, Mr. Ashby stated: "The transportation industry and all parts of it should stand on their own. If a form of transportation is justified as a part of the transportation system it should survive and thrive on its own. If it needs to be bolstered up in this day and age by a subsidy it should fold up and disappear, or cease to be a leaner, improve its management and make its product attractive to a profitable patronage."

In another portion of his address, the U.P. president declared: "It has long been my conviction that the resourcefulness of industry generally throughout this nation, under a responsible and co-operative government, would maintain this country on such a sound and prosperous basis that production and distribution would be in such volume and of such variety as to utilize all available forms of transportation, each of which has a function to perform and should be kept, including the railroads, modern and available for performing it. I cannot, therefore, become too apprehensive over the inroads that other forms of transportation may make to the detriment of the railroad transportation industry."

"These other forms of transportation offer competition to the railroads, in a limited way it is true, but, within the confines of their various fields, quite active competition. Any man worth his salt, any organization deserving to live, thrives on competition. Without it, a man, an organization, is apt to drift along and subscribe to that theory of stagnation—let well enough alone."

Competition Good.—"For years, railroads were alone in the field of long distance transportation. They grew complacent. The public could take what they offered because there was

SCRAP METAL IS PRECIOUS METAL

Railroads must have more iron and steel for cars, rails, castings, parts.

Foundries and steel mills need more scrap to make the steel the nation needs.

Railroads are the nation's best source of scrap metal...

So—
Everybody

Gather it up..

Get it in.. NOW.

and get it all

Association of
AMERICAN RAILROADS

Association of American Railroads announced on March 22. "All railroads in that week," he said, "will intensify their efforts to collect all available scrap from along their lines and move it as promptly as possible to foundries and steel mills."

nothing else to take. Then the progeny of Kittyhawk became denizens of the sky and began to propagate with almost pigeon-like fecundity. The automotive industry poured out a stream of automobiles. The wagon ruts disappeared from the dirt highways as hard-surfacing of the highways began and rapidly progressed.

"Soon the bus and the truck beckoned to the traveler and the shipper and offered a flexibility the railroad could not equal. Gradually, very gradually, the railroads sensed they were in a new era. Here was long-distance competition. For a time, too long a time, the railroads sought to stifle this competition by fighting it like Don Quixote fought the windmills, and with just about as much effect.

"And then the railroads woke up. They began to use their imagination, and in their imagination they saw, as many a smart salesman in commercial industry has seen, that the best way to market one's product is not to knock a competitor's product but to improve the attraction of one's own."

Mr. Ashby referred to the U. P. as an "optimist" with a "strong, abiding faith in the future of this nation and in the future of the railroad industry in this nation." Continuing, he stated: "Commercially speaking, the measure of a man's faith in the future is the gamble he is willing to make. Union Pacific is willing to gamble, but I do not believe it is gambling. Rather, it is betting on what it confidently feels is a sure thing.

"Since the end of hostilities Union Pacific has invested or committed itself to invest in the future of this nation and particularly in the future of western industry and agriculture over \$200 million. Union Pacific will do all in its power to provide the transportation service needed to handle an increasing flow of traffic to and from the entire west."

Gets Petroleum Post

J. E. Boice, a former valuation analyst in the engineering section of the Interstate Commerce Commission's Bureau of Valuation, has been appointed petroleum transportation specialist in the Oil and Gas Division of the Department of Interior, it has been announced by M. W. Ball, director of the division. During World War II, Mr. Boice was for nearly four years a senior transportation engineer with the Petroleum Administration for War.

To Conduct Course in Packaging, Materials-Handling at Chicago

A four-day "short course" in packaging and materials handling will be conducted by the University of Illinois at Chicago beginning on October 4, in connection with the Third Annual Industrial Packaging & Materials Handling Exposition to be held at the Sherman hotel in that city, October 5-7, inclusive. The exposition is sponsored by the Industrial Packaging Engineers

Association. Instructors in the "short course," it is stated, will be men prominent in the packaging and materials handling fields whose activities are related to packaging and materials handling.

I. C. C. Still Insists I. C. Act Doesn't Prohibit Segregation

Maintenance and enforcement by railroads of reasonable rules requiring segregation of white and negro passengers traveling in interstate commerce is not in violation of the Interstate Commerce Act, provided substantial equality of treatment is accorded both races traveling under like conditions, Division 3 of the Interstate Commerce Commission has said again in recent reports passing on complaints of negro passengers. Moreover, the division took occasion to state in one of the reports that Congress has been aware that the act was being thus interpreted since the commission was established in 1887, but has done nothing to indicate that it was not satisfied.

"The commission, within a few months after its organization," the division said, "expressed the conclusion that the separation of white and negro passengers paying the same fare is not in violation of section 3 of the act if cars and conditions equal in all respects are furnished to both and the same care and protection of passengers is observed... It has adhered to that conclusion consistently. Although the question has been constantly and persistently agitated before the public and the Congress for many years, the Congress has done nothing to indicate that it did not concur in the commission's interpretation of the act."

This comment was made in the division's report in the No. 29570 proceeding which found that the Louisville & Nashville's present dining-car regulations, requiring separate accommodations for white and negro passengers, are not in violation of the Interstate Commerce Act. On the basis of that finding, which indicated that no order for the future was necessary, the commission dismissed the complaint. At the same time, however, it also found that the negro complainants, James E. Stamps and Ennis L. Powell, had been subjected to "undue and unreasonable prejudice and disadvantage" by reason of the L. & N.'s refusal to serve them breakfast during the course of their March 17, 1946, journey between Nashville, Tenn., and Cincinnati, Ohio.

Meanwhile, the division refused to make an award of reparations; for it found nothing in the record to show that the complainants had suffered any "pecuniary damage." In that connection the report noted that the commission "has found consistently that it has jurisdiction to award reparation only for monetary damages sustained in consequence of a violation of the act, and that it may not award punitive damages."

When the complainants made their journey, the L. & N.'s instructions to its dining-car stewards directed them to draw curtains and thus set off two tables at the end of the car for negroes "for 15 to 20 minutes after the first call for each meal." If no negroes presented themselves for service in that time, and all of the seats reserved for whites had become occupied, the steward was directed to push the curtains back and seat white passengers at the two end tables. This had been done when the complainants presented themselves for breakfast; and the steward advised them that they could not be served until all seats at the end tables had been vacated by white passengers. They returned to the Pullman drawing room in which they were traveling, and declined to come to the diner again when a waiter advised them that they would be served.

The present regulations, effective since November 17, 1946, provide that the separation curtains shall be drawn at all times, and the end tables reserved for the "exclusive" use of negro passengers. The reserved section is not to be used for white passengers, even though no negroes present themselves for meals and white passengers are waiting for service.

In approving these arrangements, the commission cited the ruling of the federal district court for the district of Maryland in the case involving the complaint of another negro (Elmer W. Henderson) against the Southern. The court said it did not question the authority of the commission to approve segregation, but added: "If white passengers are seated at tables reserved for colored passengers, then equality of treatment requires that a colored passenger subsequently applying for service should be seated at any available vacant seat in the dining car."

With respect to the complainants' contentions that racial segregation of interstate passengers "is *per se* a violation of the Constitution and of sections 2 and 3 of the act," the division asserted that the United States Supreme Court "repeatedly has held that state statutes requiring the segregation of negro and white passengers are not invalid or unconstitutional *per se*." On that score the division cited several cases, including *Morgan v. Virginia*, 328 U. S. 373, wherein the Supreme Court held that a Virginia law requiring segregation of interstate passengers on buses was invalid as imposing a burden on interstate commerce.

"The complainants," the division continued, "urge that in view of the court's decision in *Morgan v. Virginia*, and its statement that seating arrangements for the different races require a single, uniform rule to promote and protect national travel, it logically follows that racial segregation by rules or regulations of a carrier is in conflict with that decision. They overlook the fact that in that case the court emphasized the

soundness of its earlier decision in *Hall v. DeCuir*, 95 U. S. 485 (which struck down a Louisiana statute prohibiting segregation of interstate passengers on steamships) and in *Chiles v. Chesapeake & O. R. Co.*, 218 U. S. 71, that in the absence of legislation by Congress a common carrier is at liberty to adopt such reasonable rules and regulations for the separation of white and negro passengers as seem to it best for the interests of all concerned, and that the test of reasonableness is the established usages, customs, and traditions of the people carried by it, the promotion of their comfort, and the preservation of the public peace and good order."

The complainants also contended that the segregation rule was invalid and unenforceable because passengers had no notice of it in published tariffs or L.&N. advertising. The division rejected this contention with citations of previous decisions wherein it had held that a regulation requiring segregation need not be published because it does not, if equal accommodations are furnished, "change, affect, or determine any part of the aggregate of the fare or the value of the service rendered."

The other recent Division 3 report on negro complaints involved those brought against the Southern by three negro women who were shifted to a "Jim Crow" car shortly after the train on which they were traveling from New York to Atlanta, Ga. (the streamlined "Southerner") entered the state of Virginia, which has a segregation law. This proceeding was docketed as No. 29607, and the complainants were Vashti Brown, Muriel Holcombe and Lillian Falls. They made their journey in January, 1945, but did not file their complaints until September, 1946, and each asked an award of reparation in the amount of \$5,000.

The latter was refused by the division for the reason set out in the report reviewed above. Meanwhile, the division did find that the three complainants had been subjected to "undue and unreasonable prejudice and disadvantage" when they were required to move into the "Jim Crow" car. But no order for the future was found necessary, because the "undue prejudice" resulted from a "rare incident" of failure on the part of the New York ticket agent to assign the complainants seats in the "Jim Crow" car originally—as he should have done under the regulations in effect. The "Southerner" is an all-coach, regular-fare train on which all seats are reserved.

Here again the issue of segregation *per se* was raised and disposed of by the division in the same manner as in the other report noted above. Thus came the same conclusion that segregation was not unlawful, provided accommodations were equal. And in the latter connection, the division found that accommodations furnished the complainants in "Jim Crow" cars were

"not shown to have been substantially different from those furnished white passengers on the train." In reaching that conclusion, the report described the cars in detail, and said generally that the "Southerner" is "an aristocrat in the coach service field and is representative of modern efforts to revitalize coach traffic by making available improved and attractive cars, trains, and services."

These complaints also contended that the segregation rules were invalid in that they were not published in tariffs. And the division said again that the act does not require the publication of rules of that kind.

C. P. R. to Install Ticket Machine in Montreal Station

The Canadian Pacific soon will install a ticket-selling machine in the ticket office at Windsor Station, Montreal, Que., it has been announced by George E. Carter, assistant passenger traffic manager. Issuing coach tickets only to principal destinations on the C. P. R., the machine is expected to handle 90 per cent of this type of business, including points as far east as St. John, N. B., and Quebec City; north to the Laurentians; south to St. Johnsbury, Vt.; and west to Detroit, Mich., and Sudbury, Ont. It will sell one-way, six months return and weekend return tickets.

All tickets are printed by the machine on blank ticket stock pre-printed with the road's standard ticket format and loaded into the machine in strip form. Operated by a ticket seller who will insert plates in a slot, the machine delivers a ticket stamped, dated and with name of destination and amount printed on it. The audit department will receive a copy for checking and record purposes. It is planned to install similar machines in other C.P.R. ticket offices if the first unit performs as expected.

Representation of Employees

The Brotherhood of Maintenance of Way Employees has retained its right to represent maintenance of way employees (below the rank of supervisor in the Track department and general foremen in the Bridge and Building department, and not including clerical employees or employees in the Signal, Telegraph and Telephone Maintenance departments) of the Pittsburgh & Lake Erie, according to the result of a recent election which has been certified by the National Mediation Board. The brotherhood defeated the challenging United Railroad Workers of America, Congress of Industrial Organizations, 656 to 459.

As the result of another election which also has been certified by the N.M.B., the Brotherhood of Locomotive Firemen & Enginemen has replaced the United Steelworkers of America, C.I.O., as the representative of locomotive firemen, hostlers and

hostler helpers employed by the Cuyahoga Valley. The board also has certified the Brotherhood of Railroad Trainmen as the representative of bus drivers employed by the Jamestown, Westfield & Northwestern; the Railroad Yardmasters of America as the bargaining union for stationmasters employed by the Birmingham Terminal; and the U.R.W. of A., C.I.O., as the representative of maintenance of way employees of the Alameda Belt Line. None of these employees formerly had been represented by any organization.

January Truck Traffic

Motor carriers reporting to the American Trucking Associations transported in January 1,946,927 tons of freight, a decrease of 1.7 per cent below the December, 1947, total of 1,980,075 tons, but an increase of 5.6 per cent over the 1,842,932 tons hauled in January, 1947. The A.T.A. index figure, based on the 1938-40 average monthly tonnage of the reporting carriers, was 212.

The January figures, according to the A.T.A., are based on comparable reports from 251 carriers in 41 states. Carriers in the Eastern district reported a decrease of 1 per cent below last December, but an increase of 2.7 per cent over January, 1947; carriers in the Southern region reported a decrease of 3 per cent below December, but an increase of 12.9 per cent over January, 1947; and carriers in the Western district reported a decrease of 2 per cent below December, but an increase of 7.1 per cent over January, 1947.

Equipment on Order

Railroads and private car lines had 121,936 new freight cars on order on March 1, as compared with 119,711 on order on February 1, according to The Association of American Railroads. Of the former total, Class I roads and railroad-owned private-controlled refrigerator companies had 108,399 new freight cars on order, as compared with 107,364 on February 1.

Cars on order by Class I roads and railroad-owned private-controlled refrigerator companies on March 1 included 35,860 box cars, of which 35,008 were plain and ventilated and 852 automobile box cars; 48,085 hopper cars, including 4,022 covered hoppers; 16,526 gondolas; 1,025 flat; 5,338 refrigerator; 800 stock and 765 miscellaneous freight cars. Of the total number of new freight cars which Class I roads had on order on March 1, 27,579 will be build in railroad shops and 80,820 in outside shops.

The Class I roads also had 1,596 locomotives on order on March 1, the most since August 15, 1923, when the number was 1,674. On March 1, 1947, there were 680 on order. The 1948 total included 108 steam, two electric and 1,486 Diesel-electric locomotives, as compared with 45 steam, six electric and 629 Diesel-electrics—on March 1, 1947.

Class I roads and railroad-owned pri-

vate-controlled refrigerator car companies put 15,518 new freight cars in service in the first two months of 1948, compared with 4,232 in the same 1947 period. Of the 1948 total, 7,278 new freight cars, were installed in February. Those installed so far this year include 7,546 box cars, of which 6,791 were plain and ventilated and 755 automobile; 5,504 hopper cars, including 129 covered hoppers; 1,100 gondolas; 1,158 refrigerator; 42 flat; 50 stock and 118 miscellaneous freight cars.

The Class I roads also put 181 new locomotives in service in the first two months of 1948, of which two were steam, two electric and 177 Diesel-electric. New locomotives installed in the same period last year totaled 158, of which 17 were steam and 141 Diesel-electric.

The Class I roads and railroad-owned private-controlled refrigerator companies retired 8,520 freight cars in the first two months of 1948, of which number 4,156 were retired in February. In

the same period of 1947, 6,250 cars were retired.

February Employment

Railroad employment decreased 0.49 per cent — from 1,317,912 to 1,311,518 — during the one-month period from mid-January to mid-February, and the mid-February total was 0.93 per cent below that of February, 1947, according to the preliminary summary prepared by the Bureau of Transport Economics and Statistics of the Interstate Commerce Commission. The index number, based on the 1935-39 average, was 131.7 for February, as compared with 134.3 for January, and 133 for February, 1947.

February employment was above that of February, 1947, in four categories, the increases ranging from 0.12 per cent in transportation (train and engine service), to 2.28 per cent in the executives, officials and staff assistants category. The decreases ranged from 0.12 per cent in the maintenance of equipment and stores group to 6.29 per cent in transportation, other than train, engine and yard.

As compared with January, employment in February rose in three groups, the increases ranging from 0.06 per cent in the professional, clerical and general category to 1.35 per cent in transportation (yardmasters, switch-tenders and hostlers). The decreases ranged from 0.19 per cent in the maintenance of equipment and stores group to 1.53 per cent in the maintenance of way and structures category.

February Revenues 12.9 Per Cent Above Those Reported in 1947

From preliminary reports of 82 Class I railroads, representing 81.7 per cent of total operating revenues, the Association of American Railroads has estimated that the February gross amounted to \$586,999,872, and increase of 12.9 per cent above the \$519,793,024 reported for the same 1947 month. Estimated February freight revenues were \$484,457,982, as compared with \$423,136,671, an increase of 14.5 per cent, while estimated passenger revenues were \$58,080,060, as compared with \$57,776,719, an increase of 0.5 per cent. The estimate for all other revenues was \$44,461,830, as compared with \$38,879,634, an increase of 14.4 per cent.

To Seek Pensions for Railroad Men with 30 Years Service

Full pensions for railroad workers completing 30 years of service, without regard to age and with retirement not compulsory, will be sought by the National Railroad Pension Forum, Thomas Stack, forum president, stated at Chicago last week. He asserted that the current demand is "based upon the fact that civil service employees may now retire at age 60 after 30 years of service and at age 62 with 15 years of

Selected Income and Balance-Sheet Items of Class I Steam Railways in the United States

Compiled from 127 reports (Form IBS) representing 131 steam railways
(Switching and Terminal Companies Not Included)

	All Class I Railways			
	For the month of November		For the eleven months of	
	1947	1946	1947	1946
1. Net railway operating income	\$65,577,488	\$64,122,214	\$700,834,367	\$516,074,511
2. Other income	19,616,070	18,293,375	182,205,786	171,484,119
3. Total income	85,193,558	82,415,589	883,040,153	687,558,630
4. Miscellaneous deductions from income	3,339,542	2,948,450	39,046,550	27,316,923
5. Income available for fixed charges	81,854,016	79,467,139	843,993,603	660,241,707
6. Fixed charges:				
6-01. Rent for leased roads and equipment	9,454,661	10,315,368	114,500,139	108,998,098
6-02. Interest deductions ¹	25,101,736	27,187,706	281,849,284	313,514,555
6-03. Other deductions	165,198	121,739	1,675,959	1,345,576
6-04. Total fixed charges	34,721,595	37,624,813	398,025,382	423,858,229
7. Income after fixed charges	47,132,421	41,842,326	445,988,221	236,383,478
8. Contingent charges	3,774,370	3,021,352	38,784,550	34,631,219
9. Net income ²	43,358,051	38,820,974	407,183,671	201,752,259
10. Depreciation (Way and structures and equipment)	29,916,237	28,655,249	323,101,690	313,029,001
11. Amortization of defense projects	1,266,977	1,235,291	14,779,606	9,304,108
12. Federal income taxes	24,558,625	1,711,353	273,452,193	53,928,301
13. Dividend appropriations:				
On common stock	41,320,936	30,981,567	154,880,318	153,903,505
On preferred stock	8,620,008	9,274,950	45,653,851	46,121,850
Ratio of income to fixed charges (Item 5÷6-04)	2.36	2.11	2.12	1.56

	All Class I Railways	
	Balance at end of November	
Selected Asset and Liability Items	1947	1946
	1947	1946
17. Expenditures (gross) for additions and betterments—Road	\$256,293,923	\$206,512,050
18. Expenditures (gross) for additions and betterments—Equipment	492,401,382	268,365,604
19. Investments in stocks, bonds, etc., other than those of affiliated companies (Total, Account 707)	581,479,582	579,029,157
20. Other unadjusted debits	206,616,477	172,256,580
21. Cash	1,020,308,068	1,051,463,179
22. Temporary cash investments	1,003,300,951	1,191,516,892
23. Special deposits	134,298,235	170,143,488
24. Loans and bills receivable	14,161,763	359,216
25. Traffic and car-service balances—Dr.	51,212,101	56,429,485
26. Net balance receivable from agents and conductors	148,124,881	122,112,099
27. Miscellaneous accounts receivable	295,546,581	301,184,105
28. Materials and supplies	753,003,892	651,003,054
29. Interest and dividends receivable	28,946,933	28,408,210
30. Accrued accounts receivable	165,399,633	153,172,863
31. Other current assets	37,342,164	31,792,770
32. Total current assets (items 21 to 31)	3,651,705,202	3,757,585,361
40. Funded debt maturing within 6 months ³	121,840,483	91,549,461
41. Loans and bills payable	4,875,000	9,245,600
42. Traffic and car-service balances—Cr.	109,378,961	106,816,508
43. Audited accounts and wages payable	610,866,429	531,603,686
44. Miscellaneous accounts payable	213,686,155	167,088,761
45. Interest matured unpaid	42,545,742	47,285,926
46. Dividends matured unpaid	12,086,861	9,297,300
47. Unmatured interest accrued	75,888,780	68,988,888
48. Unmatured dividends declared	60,639,924	49,622,918
49. Accrued accounts payable	179,548,257	191,878,695
50. Taxes accrued	621,819,034	536,665,101
51. Other current liabilities	101,244,265	108,692,977
52. Total current liabilities (items 41 to 51)	2,032,579,408	1,827,186,360
53. Analysis of taxes accrued:		
U. S. Government taxes	498,046,245	410,185,772
Other than U. S. Government taxes	123,772,789	126,479,329
54. Other unadjusted credits	337,972,007	392,066,907

¹ Represents accruals, including the amount in default.

² After a deduction of \$1,472,288 taken out of operating revenues to create reserves for land grant deductions in dispute.

³ Includes payments of principal of long-term debt (other than long-term debt in default) which will become due within six months after close of month of report.

Compiled by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission. Subject to revision.

service." In addition, he said, Congress "already favors and is ready to lower the retirement age from 65 to 60 for those covered by social security."

Civil service employees, he added, have just received a 25 per cent increase, or \$300 per year, in their pensions, with maximum annuities at 80 per cent of their average salary. Social security is "anxious to boost maximum old-age pensions from \$85 to \$120 per month," he declared.

"One and a half million rail workers now pay 5¾ per cent of their earnings up to \$300 per month into their retirement fund, must wait until age 65, unless disabled, to retire, and they cannot receive any increases in their pensions under the existing Crosser Law," Mr. Stack concluded. "Our tax rate rises to six percent starting next year, and we want our money's worth."

California on Daylight Time

Daylight saving time was effected throughout California on March 14 to offset the effects of drought and a critical shortage of electric power. Passenger train schedules on the Southern Pacific have been adjusted to conform to the new time. Trains of the Union Pacific and the Atchison, Topeka & Santa Fe will continue to operate on Pacific standard time.

Special I.C.C. Procedure to Apply In Reopened Ex Parte No. 73

The Interstate Commerce Commission has made public the "special procedure" which will apply with respect to its reopening of the Ex Parte No. 73 proceedings, wherein the commission has previously prescribed regulations for the payment of railroad rates and charges. The reopening is for further hearing "as to the credit regulations on rail less-than-carload traffic."

As reported in *Railway Age* of February 28, page 74, the commission reopened the proceeding after its consideration of the petition (and replies thereto) wherein the Missouri-Kansas-Texas and Texas & Pacific seek a modification of the regulation to enlarge the credit period on l.c.l. from the present 48-96 hrs. to seven days. Replies to the petition included that of Official territory roads which opposed the modification.

The "special procedure" calls for conducting the inquiry through the medium of written interrogatories, which the commission will prepare and serve. While it said that individual participation in the proceeding is not precluded, the commission at the same time observed that group participation would greatly facilitate the handling of the case and is therefore desired. Responses, it said, may be made by groups through such organizations as the Association of American Railroads, American Trucking Associations, Federation for Railway Progress, the Freight Forwarders Institute, the National In-

dustrial Traffic League, or by territorial groups, such as carriers' or shippers' organizations in the southwest and other territories. A proposed report will be prepared by a commission examiner. "Mere casual interest will not justify participation," the commission said, "and will make the preparation and service of verified statements and exhibits . . . burdensome and impracticable. The commission desires participation only by those who intend to take an active part in the proceeding. Otherwise, it reserves the right to restrict service of verified statements and exhibits upon groups or organizations fairly representative of all interests."

According to the commission, any party desiring to participate in the further hearing must supply the commission with certain information within 15 days of its March 11 notice. No additional parties will be allowed to participate except by "special permission and for good cause," and no formal petitions of intervention will be necessary.

The commission's notice requires "strict conformity" with respect to time schedules embodying the serving of the interrogatories, including responses and replies thereto, the submission of exhibits, and the filing of briefs. "It is apparent," it said, "that any attempt to change those schedules will seriously complicate the handling of the proceeding. Requests for extension of time will not be entertained except for unforeseen and extreme causes."

H. A. Schwartz to Address British Foundrymen in June

Harry A. Schwartz, director of research for the National Malleable & Steel Castings Co., has accepted an invitation to address the Institute of British Foundrymen in London on June 9. Dr. Schwartz's lecture on "Solved and Unsolved Problems in the Metallurgy of Blackheart Metal" will be the tenth in the Edward Williams series of addresses, one of which is delivered each year at the annual conference of the institute. When Dr. Schwartz attended the 1939 London conference of the organization he was awarded the E. J. Fox Medal for his contribution to the literature on malleable iron, the only time the medal has been awarded to anyone not a British subject.

"Exposition Flyer" Will Be 12 Hours Faster Westbound

The westbound schedule of the Chicago-San Francisco, Cal., "Exposition Flyer" will be shortened by approximately 12 hrs. beginning May 30, permitting travel through the Colorado Rockies and the Feather River canyon by daylight, according to Albert Cotsworth, passenger traffic manager of the Burlington Lines. In addition, one Vista Dome car has been placed on each set of "Exposition Flyer" equipment, which

is operated by the Burlington, Denver & Rio Grande Western and Western Pacific.

Additional Vista Dome cars will be added to the train as they are received from manufacturers. It is expected that by mid-summer three such cars will be in service on each train. The faster schedule calls for departure from Chicago at 1:30 p.m., with arrival in Denver at 8:20 a.m. the following day, in Salt Lake City, Utah, at 11:45 p.m. and in San Francisco at 9:05 p.m. on the third day.

C. A. Major Establishes \$6,000 Scholarship Fund at N. Y. U.

Cedric A. Major, president of the Lehigh Valley, has given a personal grant of \$6,000 to set up a scholarship fund at the New York University School of Commerce, Accounts, Finance. Income from the grant, to be known as the "Cedric A. Major Scholarship Fund," will be used for needy students. Mr. Major, in addition to his railroad duties, teaches accounting at the school and holds the title of adjunct professor of accounting.

Upholds Ban on Track-Use Agreement's Limitations

The Supreme Court of the United States has upheld an Interstate Commerce Commission determination to the effect that privately-owned spur tracks used by railroads for providing common-carrier freight services generally cannot be restricted against service to a particular kind of traffic. The commission's decision, noted in the *Railway Age* of June 15, 1946, page 1196, passed upon Swift & Co.'s complaint against the refusal of railroads serving Cleveland, Ohio, to deliver carload shipments of livestock direct to its packing plant in that city; and the accompanying order required the railroads to abstain from such refusal.

The case, docketed in the Supreme Court as *Swift & Co. v. Baltimore & Ohio*, reached that tribunal on appeal from a federal district court decree enjoining enforcement of the commission's order. The Supreme Court's opinion, which reversed the district court with a holding that the commission's order "is valid and should be enforced," was delivered by Justice Black. A brief dissenting opinion came from Justice Burton who went along with the lower court's view that the commission "exceeded its jurisdiction."

The Swift plant's direct connection is with the New York Central, the approach being over the spur involved in the controversy. This is a 2,544-ft. track, consisting in turn of 132 ft. owned and operated by the Central, 1,619 ft. owned by the Cleveland Union Stock Yards Company but maintained and operated by the railroad. The Stock Yards Company's section of the track was constructed in 1899, and N.Y.C. has since had general use of it under

different agreements, including that of June 16, 1924, which stated that such railroad use (called "free use") was in consideration of maintenance.

Effective February 1, 1935, however, the 1924 agreement was amended to prohibit "free use" of the track for "competitive traffic," construed by the parties to mean livestock, "a charge for which shall be subject to a separate agreement." The Stock Yards then demanded on livestock delivered over the track charges equivalent to fees it would collect if such livestock were handled through its yard facilities. The N.Y.C. and railroads for which it performed switching services to and from points on the spur considered such charges "exorbitant," and in 1938 they adopted the alternative course of discontinuing deliveries of livestock to the Swift plant. Meanwhile, the use of the spur for other traffic has continued.

Noting that the commission's findings of facts were not challenged, the Supreme Court went on to say there could be "no doubt" that those facts would constitute a violation of the Interstate Commerce Act if the spur were wholly owned by the N.Y.C. It then proceeded to answer in the negative the question whether a non-carrier owner, under the conditions present, could regulate the type of commodities that could be transported over the track.

Describing the I.C.A. as "one of the most comprehensive regulatory plans that Congress has ever undertaken," the court went on to suggest that "it would be strange had this legislation left a way open whereby carrier could engage in discriminations merely by entering into contracts for the use of trackage." Various pertinent sections of the act were next cited, the court concluding from its reading of them that the spur "was subject to the act because of its use by the New York Central under trackage agreements."

"It is just as prejudicial to shippers and the public for a railroad that uses a portion of track under lease or contract to discriminate, as it is for the discrimination to be inflicted by a railroad that owns its entire track," the opinion said. It brushed aside contentions that execution of the commission's order would result in depriving the owner of his property without due process of law.

"Property can be used by its owner only in accordance with law, and conditions its owner places on its use by another are subject to like limitations," the court continued. "Of course it does not deprive an owner of his property without due process of law to deny him the right to enforce conditions upon its use which conflict with the power of Congress to regulate railroads so as to secure equality of treatment of those whom the railroads serve."

Meanwhile, the court emphasized that it was not passing upon any questions in relation to the dedication by the Stock Yards of its track to railroad

use. "Neither," it added, "do we decide what are the relative financial rights of Stock Yards and New York Central under their contracts, nor whether Stock Yards can cancel the contract with New York Central, nor what would be the duty of New York Central should Stock Yards attempt to terminate its right to use" the track.

North Western Has Big Mail Job

The Chicago & North Western recently handled the largest mail job in its 100-year history, when 70 mail and baggage cars were required to ship samples of a new product from the R. H. Donnelley Corporation's direct mail service plant at Nevada, Iowa. The railroad dispatched trains from the Iowa city in four directions, on schedules which permitted distribution of the product in all parts of the country on the same day. The samples filled 38,000 mail sacks, weighed approximately 3,000,000 lbs., and required 25,000 sq. ft of space for storage.

Hearing on Head-End Car Safety and Sanitation Bill

The House committee on interstate and foreign commerce recently held a public hearing on H.R.4092, the bill introduced by Representative Bennett, Republican of Missouri, to give the Interstate Commerce Commission authority to prescribe "adequate standards of safety and sanitation" for baggage, express or mail cars operated on railroads. Proponents of the bill testified at the hearing which was then recessed until further notice. Meanwhile, the Senate committee on interstate and foreign commerce has announced that one of its subcommittees will hold a hearing April 20 on a similar bill, S. 1635, introduced by Senator Johnson, Democrat of Colorado.

As reported in *Railway Age* of July 19, 1947, page 67, the bills would authorize investigation by the Interstate Commerce Commission, either upon complaint or its own motion, of cars and equipment used by any railroad or furnished by a railroad to any express company. The commission also would be authorized to "determine whether such cars and equipment are suitable and proper to provide adequate standards of safety and sanitation, necessary to conform to basic requirements of safety and health for use in the service for which they are put" so that they may be used "without menace or peril to the lives, health and safety" of employees required to work and travel in such cars.

New Function for I.C.C.—The views of the commission were set out in a letter submitted to the committee by Commissioner Splawn, chairman of the commission's legislative committee. The letter was read by Representative Wolvertson, Republican of New Jersey, chairman of the committee, and inserted into the record.

The commission advised the committee that the bill, in so far as it pertains to health and sanitation, is "outside the field" of the commission. Regulation of the assailed conditions, it recommended, might be lodged with the Public Health Service. It said that, because express, mail and baggage cars generally are intermingled with passenger cars, "it would seem that if we were given such authority with respect to these cars, we should be given similar authority with respect to passenger cars in order to protect the safety of passengers and employees." The duties of the commission under such legislation would not be "unduly burdensome," it said, adding that "some additions" to its personnel would be necessary for administrative purposes.

Among those testifying orally in support of the bill were Robert Morgan, and Hartman Barber, vice-grand-president and general representative, respectively, of the Brotherhood of Railway Clerks; R. S. Hughes, general chairman, South Atlantic District Board of Adjustment, B. of R. C.; and Harry Sée, national legislative representative, Brotherhood of Railroad Trainmen. Statements advocating passage of the measure also were received from W. D. Johnson, vice-president, Order of Railway Conductors of America; J. T. Corbett, assistant grand chief engineer and national legislative representative, Brotherhood of Locomotive Engineers; and O. R. Ewing, administrator of the Federal Security Agency.

The complaints of the labor spokesmen, based on reports of Railway Express Agency messengers, were voluminous. The "deplorable" conditions turned up by a survey covering 3,517 cars in actual use during the period, July 15, 1946-August 5, 1946, included (1) wooden baggage and express cars; (2) car doors which were "extremely difficult" to open or close; (3) open vestibules or those only partially protected; (4) defective lighting; (5) poor ventilation or none at all; (6) leaky roofs and inadequate or clogged drains; (7) lack of proper signal equipment or signal equipment that didn't work; (8) incomplete safety kits; (9) dirty toilets or no toilets; (10) impure drinking water and unsanitary water containers; and (11) no heating equipment or defective heating equipment.

According to Mr. Barber, the R.E.A. has been impeded in its efforts to correct such conditions, because the equipment used by the R.E.A. is furnished by the railroads.

Asserting that the carriers have failed to take voluntary action to correct the conditions complained of and that they also have "fought bitterly" against legislation such as H.R.4092, the labor representatives called attention to an informal petition which they filed with the commission last May requesting an investigation by the com-

mission of the "unsafe and sanitary" conditions of railway cars in express service. The commission, they said, denied the petition on the grounds that it did not have the power to conduct such an investigation under the Interstate Commerce Act. Enactment of the pending bill, the proponents told the committee, would give the commission the necessary authority.

Included in an exhibit introduced by Mr. Morgan were several exchanges of correspondence between G. M. Harrison, grand president of the B. of R.C., and L.O. Head, president of the R.E.A., with respect to the condition of express car facilities. Mr. Head, in a letter dated April 19, 1947, said that R.E.A. has had the "full cooperation" of the railroads in curing remedial defects in express cars, in arranging for better facilities where possible, in incorporating improvements when cars are overhauled or reconstructed and in planning for the "greater comfort of our employees" when new cars are ordered.

New Passenger Cars Theme Of Milwaukee Advertising

With the slogan, "It's a Hiawatha Year," the Chicago, Milwaukee, St. Paul & Pacific has launched its 1948 advertising campaign, the theme of which is the placing in service this year of 153 new passenger-train cars. The road will make known its new-car program—the largest in Milwaukee history — through extensive use of newspapers, magazines, radio and direct mail. The public will be told of the road's plans to place completely new "Hiawathas" in regular service, to re-equip and refurbish existing "Hiawathas" and to modernize in whole or in part other top trains.

N. Y. Port Authority Offers To Lease, Modernize City Piers

The Port of New York Authority has submitted to William O'Dwyer, mayor of New York, a proposal to take over the city's pier system, modernize it at a cost of \$114,292,555 and operate it under a 50-year lease. The proposal calls for the construction by 1960 of four union railroad carfloat stations, three on the Hudson and one on the East river, to free 26 piers now used by railroads, a large union produce terminal along the Hudson River and six fireproof piers, as well as the rehabilitation of 56 other piers and wharves.

I.C. Wins Permission to Build Spur into Chicago Harbor Area

The Illinois Commerce Commission has authorized the Illinois Central to build a 1,600-ft. spur track into the Lake Calumet Harbor area south of Chicago, which the railroad proposes to develop into a large water-rail freight transfer terminal. The commission's decision came after nearly a year

of debate on the road's petition for such authority, the move being opposed by the Pullman Railroad and the Indiana Harbor Belt, both of which offered to develop the area.

While officers of the I. C. called the commission's approval "the first step" toward the development of the harbor area, it was pointed out that the road must negotiate with Pullman for rights to cross the latter's tracks. The authorization stipulated that work must begin within one year on a highway overpass across the I. C. spur, with half of the approximate \$550,000 cost to be borne by the state of Illinois and the remaining to be shared equally by the railroad and the city of Chicago.

Water Carrier Groups Don't Want to Report to I.C.C.

The House committee on interstate and foreign commerce held further hearings March 22 on H.R.5623, which proposes various Interstate Commerce Act amendments recommended by the Interstate Commerce Commission in its sixty-first annual report to Congress, as outlined in *Railway Age* of January 24, page 50. Although the bill, sponsored by Representative Wolverton, Republican of New Jersey, and chairman of the committee, had been ordered favorably reported to the House, hearings on the legislation were reopened in order to receive the views of protestant water carrier associations.

The water carriers objected to a proposed amendment which would extend to carrier associations, including rail, water, motor and freight forwarder, commission authority to require reports and inspect records. The railroads, meanwhile, have advised the committee that they do not "generally oppose" the entire measure.

Other proposed amendments, which were explained in detail to the committee by Commissioner Splawn, chairman of the commission's legislative committee, would (1) eliminate the requirement that a public hearing be held in all merger and acquisition cases wherein rail carriers are involved; (2) give the commission authority to prescribe rules for the extension of credit by express companies; (3) modify the provisions relating to service of notice in order to ease the commission's work in that respect; (4) remove from commission jurisdiction the extension, acquisition, or operation (as well as the construction or abandonment, as already provided) of spur tracks or of electric railways which are not operated as parts of general steam railroad systems of transportation; and (5) provide a remedy by forfeiture for failure of motor carriers, brokers, etc., to keep records in accordance with regulations prescribed under part II of the act or failures to file reports prescribed thereunder.

Another commission recommendation included in the bill would amend sec-

tion 20a, which relates to securities of carriers, so as to make it applicable to sleeping-car companies. Such legislation was enacted last year, only to be vetoed by President Truman, who objected to other provisions designed to make less restrictive the act's prohibition against carrier officers profiting from the issuance of securities by their companies.

Objection to the provision giving the commission authority to require reports and inspect records of water carrier associations was raised by three groups — the National Federation of American Shipping, Pacific American Steamship Association and the American Waterway Operators Association.

Speaking on behalf of the railroads, J. M. Souby, general solicitor of the Association of American Railroads, told the committee that the railroads "can live under the terms of the bill." The railroads, he said, were neither advocating nor opposing the measure. He informed the House group that it always has been the policy of the railroads to grant the commission "full access" to the records and reports of all railroad associations and rate bureaus.

P. R. Orders \$27,500,000 Of Freight Cars and Diesels

The Pennsylvania has placed orders for 114 Diesel-electric locomotives costing \$16,000,000 and 2,300 freight cars costing \$11,500,000, it was announced this week by M. W. Clement, president. Included in the freight cars are 300 70-ton covered hoppers and 2,000 70-ton gondolas, all to be built at the road's Altoona, Pa., shops. Eight 6,000-hp. freight and 4 1,000-hp. and 10 600-hp. switching locomotives were ordered from the Electro-Motive Division of the General Motors Corporation; 6 4,000-hp. freight and 12 1,000-hp. switching locomotives were ordered from Fairbanks, Morse & Co.; 27 1,000-hp. and 27 660-hp. switching locomotives will be built by the Baldwin Locomotive Works; and the American Locomotive Company received orders for 10 1,000-hp. and 10 660-hp. switching locomotives.

Mr. Clement described the orders as part of a postwar improvement program which involves the expenditure of \$149,000,000 for new equipment and \$8,000,000 for modernizing passenger cars. Total postwar orders now include 374 Diesel-electric locomotives, 4,400 freight cars and 395 passenger cars.

To provide for the servicing and repair of Diesel locomotives, new facilities have been, or are being, built, which will ultimately cost \$16,500,000 when fully completed.

"We are well underway on one of the largest Diesel-locomotive installations in the country," Mr. Clement said. "By May of this year we expect that all our important east-west through passenger trains will be han-

dled by Diesel power in the non-electrified territory west of Harrisburg, Pa. . . . The wholly new equipment, together with that being modernized, will enable us to release from our most important trains existing lightweight equipment that is still distinctly modern for use on other trains to replace older equipment."

The Pennsylvania, he added, has well under way a program for the complete reconstruction and modernization of 100 coaches for use throughout the system. A number of other coaches and parlor cars are being modernized to reequip several important through trains. As new sleeping, dining, lounge and observation cars now under construction are received from the builders, Mr. Clement explained, they will be used to provide entirely new trains for the "Broadway Limited," the "General," the "Liberty Limited," the "Spirit of St. Louis," the "Pittsburgher," the "Golden Triangle," the "Cincinnati Limited," and the "Sunshine Special." The "Senator," afternoon train between Washington, D. C., and Boston, Mass., and the "Congressional," between New York and Washington, will receive completely modernized equipment. A modernized train also will be provided for joint service between Chicago and Detroit, Mich., matching a similar train to be supplied by the Wabash.

Frederick Tells A.U. Institute About House Transport Inquiry

The House committee on interstate and foreign commerce hopes to receive recommendations which are not of the "self-seeking type" when it holds public hearings on April 14 and 15 in connection with its National Transportation Inquiry, the committee's consultant, Dr. John H. Frederick, said at a March 18 supper meeting of the Third Annual Rail Transportation Institute being conducted at American University, Washington, D. C. Dr. Frederick, who is also professor of transportation at the

University of Maryland, was introduced to the institute by its director, Dr. L. M. Homberger, professor of transportation at A. U.

The National Transportation Inquiry was begun in 1945 by the House committee under the sponsorship of its former chairman, Representative Lea, Democrat of California, and continued by the present chairman, Representative Wolverton, Republican of New Jersey. The dates for the hearings were announced recently by the committee.

They will be the first public hearings in connection with the inquiry, which, as Dr. Frederick pointed out, has heretofore been concerned largely with the analysis of statements submitted by interested parties. The views expressed in many of those statements, 492 of which were received by the committee, were summarized in a report prepared by Dr. Frederick, as noted in the *Railway Age* of January 11, 1947, page 139.

In his talk at the institute, Dr. Frederick reviewed this work and then proceeded to discuss the forthcoming hearings. For them, he said, the committee will announce a "tentative agenda of four or five topics" in which it is particularly interested; but that will not preclude discussion of other matters by interested parties. In expressing the committee's hope that the recommendations received will not be of the "self-seeking type," its consultant went on to suggest that the hearings may be the beginning of proceedings leading to a "Transportation Act of 1950 or 1951."

Stating that his list did not necessarily indicate the topics which the committee will single out for special consideration at the hearings, Dr. Frederick discussed what he called five problems "of significance." They are the question of bringing all federal regulation of transportation under the jurisdiction of one agency; governmental policy with respect to the control and operation of one form of carrier by another—the so-called integration question; federal aid to transportation; exemption of

regulated carriers from anti-trust laws; and the question of whether the authority of regulatory bodies should be expanded or contracted.

It was Dr. Frederick's general view that sound legislation dealing with these and other transport problems should be enacted "as speedily as we can do a good job." He went on to express his fear that the job will not have been done "before we have a depression."

"Then," he continued, "advocates of government ownership will have their day. Leaders of private enterprise are playing for very high stakes in the next few years—the preservation of an adequate private system of transportation and, perhaps, of private enterprise itself."

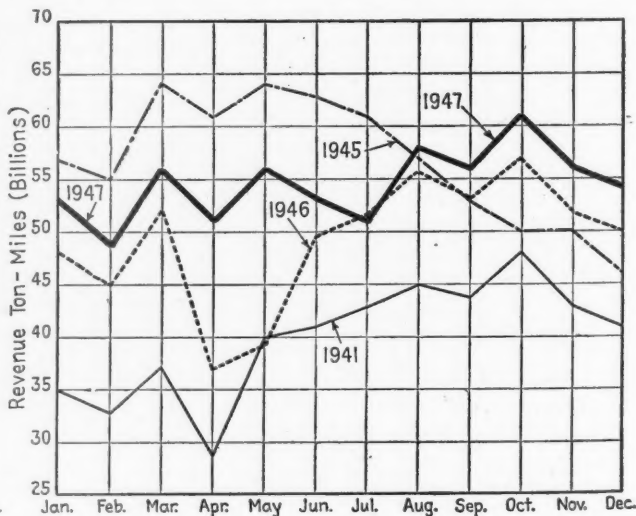
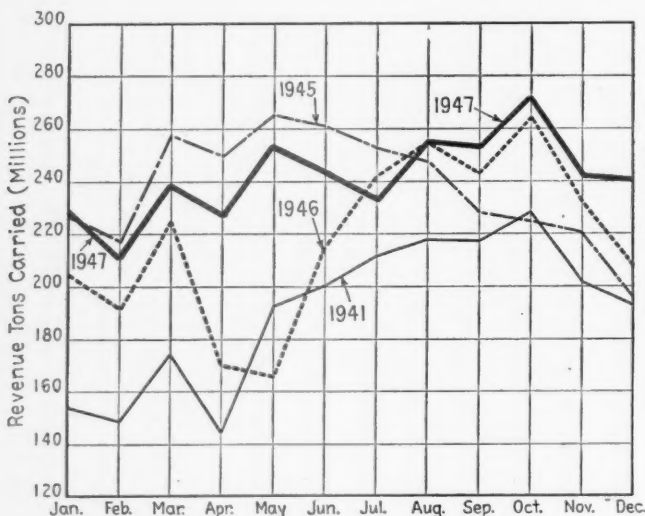
Revenue Car Loadings

Loading of revenue freight for the week ended March 13 totaled 797,033 cars, and the summary for that week as compiled by the Car Service Division, A.A.R., follows:

For the Week	Revenue Freight Car Loading Ended Saturday, March 13	1948	1947	1946
District				
Eastern	154,801	161,933	153,464	
Allegheny	172,407	179,641	171,795	
Poconantas	72,446	71,047	65,396	
Southern	138,175	142,533	142,251	
Northwestern	80,116	91,918	88,094	
Central Western	117,281	128,280	115,802	
Southwestern	61,807	65,795	63,131	
Tot. West. Dist.	159,204	285,993	267,027	
Total All Roads	797,033	841,147	799,906	
Commodities:				
Grain & gr prod	34,932	51,568	48,371	
Livestock	8,424	12,484	15,206	
Coal	194,401	191,836	188,469	
Coke	15,540	14,442	13,146	
Forest products	44,332	48,715	42,273	
Ore	15,259	14,825	10,380	
Merchand. l.c.l.	115,553	125,059	122,735	
Miscellaneous	369,592	382,218	359,326	
March 13	797,033	841,147	799,906	
March 6	792,571	805,775	786,189	
February 28	791,089	849,991	782,397	
February 21	805,376	776,689	723,281	
February 14	734,262	799,977	707,054	

Cumulative total
11 weeks ... 8,491,526 8,844,300 8,119,231

In Canada—Carloadings for the week ended March 13 totaled 74,643 cars as compared with 74,610 cars for the previous week and 72,728 cars for the corresponding week last year, according to the compilation of the Dominion Bureau of Statistics.



Revenue Tons and Revenue Ton-Miles—1947 Compared with 1941, 1945 and 1946

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada:		
March 13, 1948	74,643	37,398
March 15, 1947	72,728	39,804
Cumulative totals for Canada:		
March 13, 1948	783,909	386,806
March 15, 1947	742,280	399,155

Upholds Limit of Railroad Liability under Free Pass

The United States Supreme Court in a recent decision affirmed its previous determinations to the effect that the Hepburn Act, which restricted the issuance of passes by railroads, brought all matters relating to passes under federal regulation and thus barred recovery under state laws for injury or death of a person traveling on a pass. The case was *Francis v. Southern Pacific*, and the majority opinion by Justice Douglas was accompanied by Justice Black's dissent in which Justices Murphy and Rutledge joined.

It involved an action brought by the children of a Southern Pacific brakeman, Jack R. Francis, who was killed while riding in one of the S.P. trains on a pass. The pass bore the usual release which had been signed by the decedent. The case was tried in a federal district court where the trial judge submitted it to the jury only on the question of the railroad's "wanton negligence." The plaintiffs appealed, alleging error in the judge's refusal to submit to the jury the issue of "ordinary negligence," which, the Supreme Court dissenters said, would have been grounds for recovery under the law of Utah, where the accident occurred.

"The Circuit Court of Appeals," as the Supreme Court's majority opinion put it, "held that Utah law creates a right of action in the heirs for the wrongful death of the decedent and that the action is distinct from any which decedent might have maintained had he survived. But the court held that the action is maintainable only where the decedent could have recovered damages for his injury if death had not ensued. In this case the decedent, an employee of respondent, was riding on a free pass not in connection with any duties he had as an employee but as a passenger only. The Circuit Court of Appeals therefore held as a matter of federal law that respondent would not have been liable to decedent for damages caused by ordinary negligence. . . . It concluded that the respondent had the same defense against the heirs."

In affirming the foregoing, the Supreme Court cited its previous rulings, the most recent being in *Kansas City v. Van Zant*, decided in 1923, which held "that the liability of an interstate carrier to one riding on a 'free pass' was determined not by law but by the Hepburn Act." It went on to say that "for years" this has been the "well-settled construction" of the Hepburn Act; and that Congress was presumably aware of the situation, when it enacted the Transportation Act of 1940, but

made no change in the free-pass provision, except to qualify additional persons for such passes.

Transport Session Planned For U. S. Chamber's Meeting

Discussions of "Tomorrow's Outstanding Issues in Transportation" and "Essentials to Sound Transportation Conditions" are scheduled for the transportation-luncheon session to be held as part of the annual meeting of the Chamber of Commerce of the United States in Washington, D. C., April 26-29. The transportation session will be held on April 28, and participants are expected to include F. G. Gurley, president of the Atchison, Topeka & Santa Fe, and A. H. Schwieter, president of the National Industrial Traffic League.

Others who are scheduled to participate include E. J. Buhner, president, American Trucking Association, Inc.; Robert Ramspeck, executive vice-president, Air Transport Association of America; Charles L. Dearing of the Brookings Institution; and Joseph W. Evans and Laurence F. Lee, chairman, respectively, of the chamber's committees on international transport and urban transportation. Presiding will be Evans A. Nash, chairman of the chamber's Transportation and Communication Department Committee.

SUPPLY TRADE

Gordon E. MacLean, who has been engaged during the past seven years in laboratory research for the Dearborn Chemical Company, has joined the firm's sales department, with headquarters at Indianapolis, Ind.

Wilmer H. Cordes, manager of the market development division of the American Steel & Wire Co., at Cleveland, Ohio, has assumed the added duties of manager of the firm's advertising division.

The Lukens Steel Company and its divisions, the By-Products Steel Company and Lukenweld of Coatesville, Pa., have announced the appointment of Andrew J. Lacock, formerly a member of the sales staff, as district manager of sales at the New York district sales office to succeed J. J. Reynolds who will continue as a member of the staff in that office. William K. Fohl, manager of railroad sales, has, in addition, been appointed manager of service.

Walter C. Leitch, formerly general sales manager of the Gilbert & Barker Manufacturing Co., a subsidiary of the Standard Oil Company of New Jersey, has been elected vice-president and general manager of the Aro Equipment Corporation.

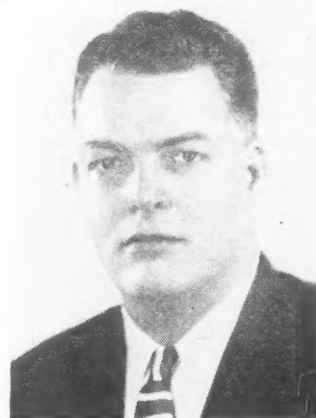
The Parker Appliance Company, Cleveland, Ohio, has announced the appointment of the Globe Machinery & Supply Co., Des Moines, Iowa, as a distributor of its complete line of tube fittings, valves and accessories for hydraulic and fluid-handling systems.

James E. McLean, vice-president of the Fort Pitt Manufacturing Company, also has been elected vice-president of the Flannery Bolt Company. The appointments of R. N. Scott as sales manager and W. C. Masters as manager of railroad sales of Flannery Bolt, also were announced.

Otto A. Kuhler, design engineer of the American Car & Foundry Co., has resigned. Mr. Kuhler will resume acting as consultant designer to the railroads, with headquarters at Pine, Colo., it has been announced.

The Hewitt Rubber division of Hewitt-Robins Inc. has announced the appointment of the Penn Central Equipment Company of Altoona, Penn., as a distributor of the entire division's line of industrial hose, conveyor and transmission belting and packing.

W. Hunter Russell, whose appointment as vice-president of the Spring Packing Corporation, at Chicago, was reported in *Railway Age* of March 13, received his higher education at the University of Illinois, after which he entered the serv-



W. Hunter Russell

ice of the Illinois Central at Chicago. He later joined the American Locomotive Company, with headquarters at Cleveland, Ohio. Prior to his recent appointment, Mr. Russell was district manager of the Baldwin Locomotive Works at St. Louis, Mo.

A. M. Davis, district engineer of the Portland Cement Association, with headquarters at Lansing, Mich., has been appointed manager of the association's midwestern offices, at Chicago, succeeding Carl D. Franks, whose election as vice-president for promotion was reported in *Railway Age* of March 20. Mr. Davis is succeeded by J. Gardner Martin, structural engineer at Detroit, Mich.

E. J. McMahon, production manager of the Dearborn Chemical Company, at Chicago, has been elected vice-president and a director of the company, succeeding John W. Brashears, who has retired after 52 years of service with the firm.

The Hennessy Lubricator Company has announced the removal of its offices from 75 West street, New York, to Chambersburg, Pa., effective April 1.

The Reynolds Metals Company, Louisville, Ky., has announced the appointments of two new distributors of its aluminum mill products: The Hamilton Steel Company, 12875 Taft road, Cleveland, Ohio, and the Arthur C. Harvey Company, Harvey Steel road, Allston district, Boston, Mass.

William H. Schuster, formerly welding engineer of the Foster Wheeler Corporation, has been appointed welding supervisor of the American Car & Foundry Co., with headquarters in New York.

SKF Industries, Inc. has announced that, effective April 1, its branch office at Charlotte, N. C., will become district headquarters covering North and South Carolina, part of Virginia, part of Tennessee and part of Georgia.

John A. Hutcheson, formerly associate director of the research laboratories of the Westinghouse Electric Corporation, has been appointed director of the research laboratories, to succeed L. Warrington Chubb, who has retired but who will continue to serve in an advisory capacity.

John R. Queen, formerly Texrope sales representative for the Allis-Chalmers Manufacturing Company in the New York district office, has been appointed dealer supervisor at New York, for the company's Empire region.

OBITUARY

Asthus Cane Lewis, vice-president in charge of sales of Templeton, Kenly & Co., with headquarters at Chicago, died on February 23, at Toronto, Ont. Mr. Lewis had been associated with the firm's Simplex Jacks division since 1944, prior to which time he had been a special sales representative with the Railway Power & Engineering Corp. of Toronto.

Edward M. Collins, president of the railway supply firm bearing his name and railway sales representative of S. Karpén & Bros. with headquarters at Chicago, died at St. Luke's hospital in that city following a short illness.

Tracy V. Buckwalter, who retired in 1945 as chief engineer and vice-president of the Timken Roller Bearing Company, died at Fort Lauderdale, Fla., on March 15. Mr. Buckwalter was 67. He became associated with the Timken Company in 1916 as chief engineer after

16 years in the Altoona, Pa., shops of the Pennsylvania. He was elected vice-president of Timken in 1925.

ORGANIZATIONS

Cincinnati Traffic Club installed the following officers for the year 1948-49 at the 20th annual dinner held at the Hotel Netherland Plaza: President—P. R. Bauer, traffic manager, Philip Carey Manufacturing Company; vice-presidents—J. Edward Fixari, regional manager, Transamerican Freight Lines, L. H. Sickman, traffic manager, E. Kahns' Sons Company, and Harold S. Smith, district freight agent, Baltimore & Ohio; secretary—H. F. Oehlschlaeger, general agent, Monon; and treasurer—E. A. Whiting, traffic manager, S. A. Gerrard Company.

At the 65th annual meeting of the New England Railroad Club held at the Hotel Vendome, Boston, on March 9, the following officers were elected to serve during the ensuing year: President—E. K. Bloss, mechanical engineer, Boston & Maine; vice-president—E. E. Oviatt, chief engineer, New York, New Haven & Hartford, treasurer—P. S. Chynoweth. William E. Cade was re-elected secretary of the club.

The annual president's ball of the Traffic Club of Cleveland will be held at the Tudor Arms hotel, Cleveland, Ohio, on April 3.

The next meeting of the Indianapolis Car Inspection Association will be held in the committee room of the Indianapolis (Ind.) Union Station on April 5 at 7:00 p.m.

The Car Foremen's Association of Omaha will meet at the Y.M.C.A. Council Bluffs, Iowa, on April 8 at 6:30 p.m.

A dinner meeting of the New England Railroad Club will be held on April 13, 6:30 p.m., at the Hotel Vendome, Boston, Mass. E. P. Gangwere, superintendent motive power and rolling equipment of the Reading, will present a paper entitled "Rolling Wheels Gather No Rust."

The fourth annual spring convention of the Mid-South Air Brake Club will be held at the Chisca Hotel, Memphis, Tenn., April 14 and 15.

The Canadian Railway Club will meet April 12, 8 p.m., at the Mount Royal Hotel, Montreal, Que. Present as guest speaker will be E. P. Reese, managing director, Furness, Whithy & Co.

A meeting of the Northwest Car Men's Association has been scheduled for April

5, 8 p.m., at the Midway Club, St. Paul, Minn. C. L. Spies of the Union Tank Car Company will present a paper entitled "Short Cuts and Labor Saving Devices in Train, Yard and Repair Track Operations" which will be illustrated by motion pictures.

The next meeting of the Car Foremen's Association of Chicago will be held at the LaSalle Hotel on April 12 at 8 p.m. A paper entitled "Hot Boxes and Train Movements" will be presented by Robert Schey, superintendent of the car department, New York, Chicago & St. Louis.

William T. Faricy, president of the Association of American Railroads, will address the Western Railway Club at its next regular monthly meeting to be held on April 19, 6 p.m., at the Hotel Sherman, Chicago.

The 23rd annual dinner of the Metropolitan Traffic Association will be held at the Commodore Hotel, New York, on April 22 at 7 p.m.

At the 75th regular meeting of the Pacific Coast Transportation Advisory Board the following officers were re-elected: General chairman—T. F. McCue, traffic manager, Crane Company; vice general chairman—Irrving F. Lyons, traffic director, California Packing Corporation; general secretary—J. W. Witherspoon, assistant general traffic manager, United States Rubber Company.

The Allegheny Regional Advisory Board at its recent meeting elected the following officers for the ensuing year: General chairman—J. B. Keeler, manager traffic and transportation, Koppers Company; vice general chairman—C. W. Gottschalk, general traffic manager, Jones & Laughlin Steel Corp.; general secretary—J. N. Lind, assistant general traffic manager, National Supply company; chairman executive committee—W. E. Fowler, general traffic manager, Youngstown Sheet & Tube Co.; and vice-chairman executive committee—W. W. Larkin, traffic manager, Continental Foundry & Machine Co.

The second annual Engineering Progress Show will be held at the Franklin Institute, Philadelphia, Pa., May 11-14, inclusive.

The 39th annual convention of the Special Libraries Association will take place on June 6-11, at the Hotel Statler, Washington, D. C.

R. W. Brown, president of the Reading, will discuss the career of the late Daniel Willard, president of the Baltimore & Ohio, at the annual dinner of the St. Louis (Mo.) Committee of the Newcomen Society in North America, to be held at 7 p.m. on April 7, at the Park Plaza hotel in St. Louis.

EQUIPMENT AND SUPPLIES

SIGNALING

N.P. Train Communication

The Northern Pacific has announced plans to install radio train communication on all through freight trains on a 139-mi. subdivision crossing the Cascade mountains between Yakima, Wash., and Auburn. Eleven Diesel-electric locomotives and 11 cabooses are to be equipped. Also, fixed station radio apparatus will be installed at Yakima and Auburn for communication with the trains when approaching or departing from these terminals.

The radio apparatus, which has been ordered from the Bendix Radio Division of the Bendix Aviation Corporation, will operate on two frequencies, one for end-to-end communication on trains, and the other between fixed stations and trains. The cabooses will be equipped with axle generators, storage batteries and rotary converters to supply a.c. power for the radio.

LOCOMOTIVES

The Spokane, Portland & Seattle has placed orders for 4 Diesel-electric freight locomotives. One 1,500-hp. and 2 6,000-hp. locomotives were ordered from the American Locomotive Company and 1 2,000-hp. locomotive was ordered from the Electro-Motive Division of the General Motors Corporation. The 1,500-hp. unit is scheduled for delivery in January, 1949, the 6,000-hp. engines in March, 1949, and the 2,000-hp. engine next July.

Railroad Diesel Locomotive Inventory on December 31

According to statistics compiled by *Railway Age*, there were 6,548 Diesel locomotive units in service on domestic railroads as of December 31, 1947, of which 5,919 were owned by Class I railroads, and 629 were owned by terminal and switching companies and Class II and III railroads. Diesel road units operated by Class I railroads totaled 3,003 with an aggregate horsepower of 4,670,010, which is 93 per

cent more horsepower than that of the 2,916 switching units in service for railroads in the same class.

The Diesel locomotive inventory of Class I railroads was increased in 1947 by 1,340 units, of which 25 were 3,000 hp., 211 were 2,000 hp., 799 were 1,500 hp. and the remainder 1,000 hp. or less. The distribution of the horsepower of Diesel locomotive units of Class I railroads as of last December 31 is presented in the accompanying table.

Timken Bearings Ordered For L. & N. Locomotives

The Timken Roller Bearing Company has announced the receipt of an order for more than 900 large size bearings and parts for all axles of the 22 steam locomotives and tenders being built for the Louisville & Nashville by the Lima-Hamilton Corporation. Delivery of the bearings and parts are scheduled to begin in August and be completed in October.

FREIGHT CARS

L.&N. to Spend \$1,373,300 For "AB" Brakes in 1948

The shop forces of the Louisville & Nashville are scheduled to equip 5,000 of the road's freight cars with "AB" brakes this year at an estimated cost of \$1,373,300. In addition, the L. & N. plans to convert 150 box cars into pulpwood cars by removing the entire superstructure except steel ends, replacing flooring with a heavier floor and bolting scrap rail to the floor on both sides of the car. This conversion will cost \$109,738. The road also will equip 120 locomotives with smoke abatement devices.

The Southern Pacific has announced the placing of orders for 8,580 freight-train cars at an estimated cost of \$40,000,000. Included in the new equipment, which covers a major portion of the 9,830 cars in the road's 1948 program for rolling stock, are 3,350 50-ton box cars to be built by the Pullman-Standard Car Manufacturing Company; 1,000 50-ton drop-bottom composite gondola cars to be built by the General American Transportation Corporation; 1,000 50-ton drop-bottom steel gondola cars to be built by the Bethlehem Steel Company; 700 50-ton tight-bottom gondola

cars, 600 50-ton flat cars, 1,500 70-ton flat cars, and 350 70-ton covered hopper cars, all to be built by the American Car & Foundry Co.; and 80 bay-window steel cabooses to be built in the road's shops at Los Angeles, Cal. Deliveries of the cars ordered from Pullman-Standard and Bethlehem Steel are scheduled to begin next September and deliveries of the other cars, excluding the cabooses, are expected to begin in the fourth quarter of the year.

The Chesapeake & Ohio is inquiring for 1,000, 2,000 or 3,000 70-ton triple hopper cars.

The Louisville & Nashville is inquiring for 1,000 to 4,000 50-ton steel twin hopper cars.

CAR SERVICE

Revised Service Order No. 340-A, made effective by the I.C.C. on March 5, vacated Revised Service Order No. 340, which had prescribed minimum weights on outbound cars from transfer points in the West, where west-bound carload freight is transferred by railroads.

I.C.C. Service Order No. 775, which maintains super-demurrage charges on all types of freight cars, has been modified by Amendment No. 8 which suspended as of March 16 the order's application to gondola and hopper cars loaded with bituminous coal. The amendment was issued after the coal miners' strike had got under way.

ABANDONMENTS

Atlantic & Carolina.—Division 4 of the Interstate Commerce Commission has authorized this road to abandon its entire line, extending approximately 9.5 miles from Warsaw, N. C., to Kenansville.

Chicago, Burlington & Quincy.—This road has applied to the Interstate Commerce Commission for authority to abandon its line between Clearmont, Mo., and Shambaugh, Iowa, 10.4 miles which was damaged by floods last year. It was estimated that it would cost \$149,000 to repair the line and in excess of \$345,000 to rebuild it to withstand similar floods.

Northern Pacific.—In a supplemental report Division 4 of the Interstate Commerce Commission has authorized this road to abandon a branch from Wyoming, Minn., to Taylors Falls, 20.6 miles. A similar application was denied by the

Diesel Units in Service—Class I Railroads

Horsepower	Freight Locomotive Units		Pass. & Comb. Pass. & Freight Locomotive Units		Total	
	No.	Total hp.	No.	Total hp.	No.	Total hp.
3,000	12	36,000	14	42,000	26	78,000
2,000	23	46,000	678	1,356,000	701	1,402,000
1,800			36	64,800	36	64,800
1,350 or 1,500	1,799	2,531,100	332	487,650	2,131	3,018,750
1,200			19	22,800	19	22,800
1,000	45	45,000	28	28,000	73	73,000
Less than 1,000	17	10,660			17	10,660
Total Road Loco. Units	1,896	2,668,760	1,107	2,001,250	3,003	4,670,010
Switching Loco. Units	(Averaging approx. 830 hp. per unit)				2,916	2,414,910
Total Road and Switching Units					5,919	7,084,920

Note:—629 Diesel locomotive units of 483,260 hp. are estimated to be in service on switching and terminal companies and on Class II and III railroads.

commission in 1944, without prejudice to its renewal after the cessation of World War II.

The abandonment, which was approved subject to the usual employee-protection conditions, will become effective on July 1, by which time it is expected that shippers affected will be able to adjust their transportation requirements to trucking operations. According to the commission, the territory served by the line has insufficient traffic to support rail transportation facilities.

Reading.—Division 4 of the Interstate Commerce Commission has authorized this road to abandon a portion of a branch from a point near Trexlertown, Pa., to the end of the branch at Breinigsville, 1.7 miles. The usual employee-protection conditions were imposed.

Reading.—Division 4 of the Interstate Commerce Commission has authorized this company to abandon a portion of a branch from Kimberton, Pa., to the end of the line at Byers, 6.7 miles.

Reading.—Division 4 of the Interstate Commerce Commission has authorized this company to abandon those portions of the Catasauqua & Fogelsville from a point near Alburts, Pa., to a point near Lock Ridge, approximately 0.4 mile, and from a point near Lock Ridge to the end of the branch at Rittenhouse Gap, approximately 3.9 miles.

CONSTRUCTION

Akron, Canton & Youngstown.—This road is considering a proposal to extend its line eastward 42 miles from Mogadore, Ohio, to Youngstown, according to H. B. Stewart, Jr., president. Last December a reconnaissance map was completed, according to which the connection would be with the Lake Erie & Eastern at Girard, Ohio, immediately adjacent to Youngstown. An engineering and cost survey is approximately two-thirds completed and very shortly a traffic survey will be undertaken. The results of these various studies, Mr. Stewart said, will determine whether the A.C.&Y. should proceed with a petition to the Interstate Commerce Commission for a certificate of necessity and convenience. "We are convinced," he added, "that there is much in the public interest to justify such an extension."

Louisville & Nashville.—This road has authorized a number of projects involving, in addition to general improvements, the rebuilding and replacing of bridges. These various jobs, with estimated costs in parentheses, are as follows: Construct additional storage tracks near Nortonville, Ky., (\$77,-

800); rehabilitate the Oak Street interlocker at Nashville, Tenn., to provide remote control from the machine located in the South End interlocking tower, the cost of which will be borne jointly by the L. & N. and the Nashville, Chattanooga & St. Louis (\$65,-814); install an overhead steam pipe line from powerhouse to roundhouse at Boyles, Ala., and retire three boilers and feed tank (\$28,383); replace present 90-ft. tipping-type turntable with 120-ft. non-tipping type, at Ravenna, Ky. (\$95,000); construct new mechanical coaling station and install electric pumping station at Wheelerton, Tenn. (\$44,800); extend roundhouse and eight pits at DeCoursey, Ky., \$40,000; install Diesel fueling facilities at Boyles and Montgomery (\$57,386); and make general improvements on the Eastern Kentucky division, to include extension of passing track at Agawam, enlarging Yellow Rock tunnel, installing of Diesel fueling station at Gentry and remodeling of one stall in the roundhouse at Ravenna (\$60,100).

As noted in the *Railway Age* of February 14, the road will construct a 5.94-mi. extension to its Leatherwood Creek branch from Jim Hill, Ky., to serve coal mines in that area. This project will cost an estimated \$1,037,583, including \$413,150 for grading, \$332,980 for bridges, trestles and culverts and \$167,674 for track work. The contract for grading and drainage has been awarded to the Codell Construction Company of Winchester, Ky.

The railroad plans to rebuild the following bridges: No. 2, Catrons Creek branch, Cumberland Valley division, to provide larger drainage and to prevent washouts and property damage (\$23,284); No. 7, Rolling Fork, Louisville division, Lebanon branch (\$113,544); No. 1, South Alabama division (\$37,099); No. 23, Myrtlewood (Ala.) branch (\$26,914); and No. 67, Evansville division (\$68,787). Bridge No. 74 over the Alabama River on the Birmingham division will be replaced at a cost of \$125,488 and \$27,481 will be spent to replace the road's bridge No. 73.

Norfolk Southern.—This road has authorized a project involving the installation of icing facilities for perishable freight at Euclid, Va. The work will be done by the road's own forces at a probable cost of \$78,000.

Texas & Pacific.—Construction on this road's new \$1,500,000 freight terminal in the Trinity industrial district of Dallas, Tex. (see *Railway Age* of December 27, 1947, page 59), is scheduled to begin on April 1. A contract for \$1,117,460 has been awarded to J. W. Bateson, Dallas contractor, for construction of the central unit of the improvement, including offices, inbound and outbound warehouses, paving, sewers, drainage, water lines and gas lines. The remainder of the project's

cost is allotted to the building of a motor transport garage, grading and leveling the building site, and construction of track.

FINANCIAL

Missouri Pacific.—*Equipment Trust Certificates.*—Division 4 of the Interstate Commerce Commission has authorized this road to assume liability for \$4,330,000 of series JJ equipment trust certificates, the proceeds of which will be applied toward the purchase of 10 4,500-hp. Diesel-electric freight locomotives and 16 streamlined passenger cars, estimated to cost \$5,784,030, as outlined in *Railway Age* of March 6, page 70. The locomotives will be acquired from the American Locomotive Company and the cars from the American Car & Foundry Co. The certificates will be dated March 1 and will mature in 10 annual installments of \$433,000, starting March 1, 1949. The report also approves a selling price of 99.181 with a 2¼ per cent interest rate, the bid of Halsey, Stuart & Co., and associates, on which basis the average annual cost will be approximately 2.42 per cent.

Peoria & Eastern.—*Annual Report.*—Operating revenues of this road last year totaled \$5,360,213, compared with \$4,156,129 in 1946. Operating expenses amounted to \$4,580,111, compared with \$4,182,714. Net income was \$221,502, compared with a net deficit of \$222,480.

Rutland.—*Reorganization.*—Making a second supplemental report in the Finance Docket No. 14635 proceeding, Division 4 of the Interstate Commerce Commission has approved a modified plan of reorganization for this road to provide that the new preferred and common stock to be issued in consummation of the plan will be placed under voting trusts for a period of five years and to provide for the issuance of voting-trust certificates. The original plan for reorganization under section 77 of the Bankruptcy Act (see *Railway Age* of March 29, 1947, page 675), was remanded to the commission by the federal court because the plan failed to provide for voting trusts. Other features of the plan, as previously approved, remain unchanged.

The voting trustees would be empowered to sell, subject to commission approval, all or a portion of the stock deposited under each trust and to consent to the sale or lease of all or a portion of the property of the reorganized company. Such transactions would require the approval of holders representing at least 66 2/3 per cent of the shares of stock deposited under each trust. The division said, "it appears that it is not only desirable but also essential that the stock of the new company be placed in a voting trust or

trusts to insure stability and continuity of management during the critical early years of the reorganized company's existence as well as to avoid the probable danger of its control falling into the hands of persons whose primary interest might be in scrapping the road rather than its continued operation."

Division 4's latest action also rejected a plan of reorganization proposed by the so-called Rutland Railroad Crisis Committee, as outlined in *Railway Age* of November 29, 1947, page 64. The committee's plan would have made the road part of a cooperative set-up designed to serve dairy farms along the line. It contemplated the organization of a Rutland Cooperative Transportation System which would acquire the railroad properties through issuance of bonds in an amount equal to one-third of the capitalized of \$10,992,950, which is provided in the plan as approved by the commission.

Concurring in part, Commissioner Miller said he approved the modifications with respect to the establishment of voting trusts and the election of the board of directors of the reorganized company, but still adheres to his view that the new capitalization should be \$15,555,150, as proposed by the old preferred stockholders (see *Railway Age* of December 28, 1946, page 1093.)

St. Louis Southwestern.—Dividends.—This road has declared a dividend of \$5 a share on the 5 per cent preferred stock, payable on March 22 to stockholders of record on March 15. The previous payment on this issue was \$3.75 a share in 1930. The board of directors announced also that it would meet on March 24 to vote on an initial dividend of \$5 a share on the common stock.

Gulf, Mobile & Ohio.—Annual Report.—Operating revenues of this company amounted to \$73,330,078 in 1947, compared with \$63,747,635 in the preceding year. Operating expenses totaled \$55,224,124, compared with \$55,241,240. Fixed charges were \$1,700,429, compared with \$1,444,119. Net income was \$4,032,376, compared with \$994,643. (For comparative purposes, figures for the Alton, which was absorbed in June 1, 1947, are included in the results for both years).

Savannah & Atlanta.—Annual Report.—Operating revenues of this road amounted to \$2,638,198 in 1947, compared with \$1,866,311 in the preceding year. Operating expenses totaled \$1,863,960, compared with \$1,626,252. Fixed charges were \$51,362, compared with \$55,602. Net income was \$266,746, compared with \$3,199. Current assets at the end of the year were \$1,946,421, compared with \$1,419,204. Current liabilities were \$874,138, compared with \$553,808. Long term debt amounted to \$930,000, a decrease of \$20,000.

Southern Pacific.—Acquisition.—This road has applied to the Interstate Commerce Commission for authority to acquire, through stock ownership, control of the Union Belt Railway of Oakland, Calif. The line is now operated by the S.P. According to the applicant, it proposes to acquire for cash all the outstanding stock for \$85,000, subject to certain adjustments.

Southern Pacific.—Bonds.—Division 4 of the Interstate Commerce Commission has authorized this road's subsidiary, the Central Pacific, to issue not exceeding \$37,396,000 of first mortgage series B bonds, the proceeds of which will be applied, together with other funds, toward the redemption of \$37,522,500 of outstanding first refunding mortgage 4 per cent gold bonds, due August 1, 1949. The commission's order also authorized the S.P. to assume liability as guarantor of the new issue. The bonds will mature February 1, 1968. The report approves a selling price of 99.40 with a 3½ per cent interest rate, the bid of Halsey, Stuart & Co., and associates, on which basis the average annual cost will be approximately 3.67 per cent. The bonds will be redeemable at the option of the C.P. as a whole or in part after February 1 at prices ranging from 102½ to and including January 31, 1949, decreasing gradually each year thereafter to 100¼ to and including January 31, 1966, and thereafter at par.

Southern Pacific.—Annual Report.—Operating revenues of this system last year were \$529,021,013, an increase of \$44,184,621, or 9.11 percent, over 1946. Operating expenses were \$402,242,476, a decrease of \$29,166,376, or 6.76 per cent. Fixed charges totaled \$19,652,939, a decrease of \$3,459,473, or 14.97 per cent. Net income was \$33,436,587, an increase of \$8,155,480, or 32.26 per cent. Current assets at the end of the year amounted to \$199,314,422, compared with \$183,266,961. Current liabilities were \$109,636,560, compared with \$80,739,112. Long-term debt was \$558,525,531, compared with \$536,639,188.

Tennessee.—Bonds.—This road has applied to the Interstate Commerce Commission for authority to extend from August 2 to August 2, 1968, the maturity date of \$917,200 of outstanding 6 per cent, 30-year income debenture bonds. According to the road, 95 per cent of the bondholders affected by the contemplated extension have assented to the proposal. Declaring that it will be unable to pay the principal amount of the bonds upon maturity in August, the applicant said that the extension is necessary if it is to carry on without undergoing reorganization and a possible interruption of service.

Union Pacific.—Preliminary Annual Report.—Operating revenues of this company amounted to \$410,053,704 last year, compared with \$361,395,534 in

1946. Operating expenses totaled \$300,454,623, compared with \$286,809,739. Net income was \$54,447,495, compared with \$30,431,003. Current assets at the end of the year were \$224,048,185, compared with \$279,222,204. Current liabilities were \$107,022,285, compared with \$79,919,994. Funded debt was \$240,710,232, compared with \$319,891,869.

Missouri Pacific.—Plan of Reorganization.—Alleghany Corporation, as a holder of M.P. securities, has filed a plan of reorganization for this road with the Interstate Commerce Commission. Further hearings in the M.P.'s reorganization proceedings opened at the commission's Washington, D. C., offices on March 23 before Commissioner Miller, R. T. Boyden, chief of the reorganization section of the commission's Bureau of Finance, and Examiner R. H. Jewell. As reported in *Railway Age* of March 20, page 104, the hearing was ordered to receive further evidence pursuant to orders by federal courts referring the approved plan of reorganization back to the commission. Return of the plan was recommended by the commission.

Alleghany's plan calls for a total capitalization of \$618,995,652, an increase of more than \$58,000,000 above the capitalization approved by the commission in the original plan. Alleghany said its plan has the support of a group of institutional investors representing "large blocks" of M.P. first mortgage bonds, the trustee of general mortgage bonds and the board of directors of the debtor corporation. The effective date of the reorganization would be January 1, 1933, and distribution of securities would be based on claims as of that date.

The Alleghany plan proposes four classes of 4 per cent first mortgage bonds, maturing in 25, 35, 45 and 55 years, in addition to an issue of 5½ percent general mortgage income bonds which would be due in 65 years. It also calls for 1,084,080 shares of preferred stock and 2,483,889 shares of common stock. The stock would have a par value of \$1 per share and would be allocated, according to the plan, to meet claims at either \$36 or \$40 per share. Holders of M.P. preferred and common stock would receive for each \$100 par value one-half share of new common stock. The plan further provides for the distribution of \$11,190,428 in cash, of which \$6,625,000 would be set aside for retirement of securities by tender, or for the corporate purposes of the reorganized company.

According to Alleghany, holders of \$643,455,044 of M.P. bonds and preferred and common stock would receive \$378,246,907 in bonds and unsecured 4 per cent income debentures, in addition to \$19,406,840 of preferred stock and \$99,355,588 of common stock. The plan also provides for the settlement of claims of holders of International-Great Northern and New Orleans, Texas & Mexico securities, those two roads being subsidiary debtors.

Alleghany said the plan modifies the 1943 plan so as to take into account changed conditions, including debt reduction, which occurred subsequent to approval of the original plan. "Provision is . . . made in the new plan for recognition of both preferred and old common stockholders in line with the statements of Robert R. Young, chairman of the board . . . that such holders are entitled to representation in the reorganization," it said, adding that the \$58,000,000 increase in capitalization is "attributable to the increased earning power" of the M.P. and to the "generally higher price levels."

New York Central.—Equipment Trust Certificates.—Division 4 of the Interstate Commerce Commission has authorized this road to assume liability for \$12,600,000 of 2½ per cent equipment trust certificates, the proceeds of which will be applied toward the purchase of 2,000 55-ton self-clearing steel hopper cars, 10 2,000-hp. Diesel-electric transfer locomotives and 73 passenger cars, as outlined in *Railway Age* of March 6, page 71. The equipment is estimated to cost \$17,407,384. The certificates will be dated March 15 and will mature in 10 annual installments of \$1,260,000, starting March 15, 1949. The report also approves a selling price of 99.429 with a 2½ per cent interest rate, the bid of Harriman, Ripley & Co. and Lehman Brothers, on which basis the average annual cost will be approximately 2.49 per cent.

Tennessee Central. — Equipment Trust Certificates.—Division 4 of the Interstate Commerce Commission has authorized this road to assume liability for \$314,000 of series E per cent trust certificates, the proceeds of which will be applied toward the purchase of 100 50-ton all-steel hopper cars, at an estimated unit cost of \$3,490, from the American Car & Foundry Co., as outlined in *Railway Age* of January 10, page 57. The certificates will be dated April 1, and will mature in 20 semi-annual installments, starting October 1. At the same time, the commission approved an agreement under which the road has arranged to sell the certificates to the Reconstruction Finance Corporation at not less than par. According to the commission's report, approximately 50 banking houses failed to respond to the applicant's request for bids to purchase the certificates.

Dividends Declared

Belt Stock Yards.—common, 50¢ quarterly, payable April 1 to holders of record March 20; 6% preferred, 75¢ quarterly, both payable April 1 to holders of record March 20.

Dover & Rockaway.—common, \$3.00, semi-annually, payable April 1 to holders of record March 31; common, \$3.00, semi-annually, payable October 1 to holders of record September 30.

Kansas City Southern.—4% preferred, \$1.00, payable April 15 to holders of record March 31.

New York, Chicago & St. Louis.—6% preferred A (accum.), \$1.50, payable April 15 to holders of record March 31.

Reading.—4% 2nd preferred, 50¢, quarterly, payable April 8 to holders of record March 18.

Spokane International.—\$2.50, payable April 1 to holders of record March 22.

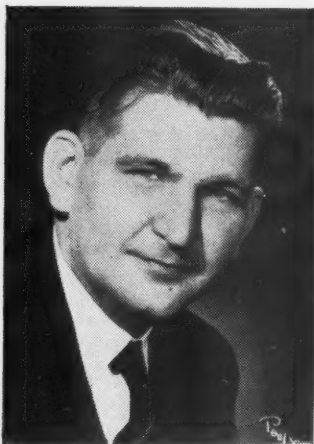
Average Prices Stocks and Bonds

	Mar. 23	Last week	Last year
Average price of 20 representative railway stocks	48.81	46.31	48.36
Average price of 20 representative railway bonds	86.23	85.66	91.12

RAILWAY OFFICERS

EXECUTIVE

R. G. Rydin, whose promotion to assistant vice-president, executive department, of the Atchison, Topeka & Santa Fe, at Chicago, was reported in the *Railway Age* of January 31, was born in Chicago on November 25, 1898, and was educated in the public schools of that city and at Northwestern University. He entered Santa Fe service in 1916 as a pass clerk in the office of the president at Chicago, and subsequently

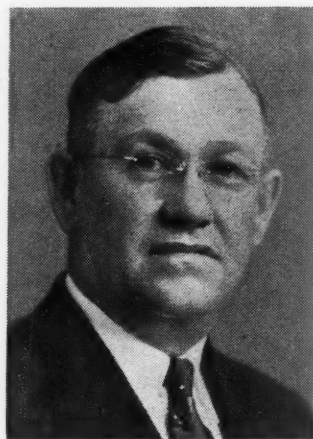


R. G. Rydin

held various stenographic and clerical positions in that office until 1920. In that year he became secretary to the president, followed by his appointment, successively, to general clerk in 1924, assistant chief clerk to president in 1927 and chief clerk to president in 1937. He was advanced to assistant to president in 1942 and to executive representative of the president at San Francisco, Cal., in 1944, which position he held at the time of his recent appointment.

Charles P. Cahill, whose promotion to assistant to vice-president—operation, of the Chicago, Rock Island & Pacific at Kansas City, Mo., was reported in *Railway Age* of February 14, was born on April 23, 1886, at Lyndonville, Vt. Mr. Cahill entered railroad service in 1899 as a call boy on the St. Joseph & Grand Island (now Union Pacific). During his early career he worked for several roads, holding positions as yard clerk, telegraph, weighmaster, bill clerk, train dispatcher, chief dispatcher and train

rules examiner. In 1917 he was made trainmaster of the U.P. at Kansas City, and in 1926 was advanced to assistant superintendent at Denver, Colo. In 1935 he was made superintendent of the Colorado and Kansas division of the U.P., and later held positions as general superintendent and general manager at



Charles P. Cahill

Omaha, Neb. He joined the Rock Island in 1943 as assistant to general manager at Kansas City, and was promoted to assistant general manager at El Reno, Okla., in November, 1946. Mr. Cahill was serving in the latter position at the time of his new appointment.

R. Wright Armstrong, whose election as vice-president of the Fort Worth & Denver City (part of the Burlington Lines), at Fort Worth, Tex. was reported in *Railway Age* of March 6, was born at Brownwood, Tex., on



R. Wright Armstrong

December 18, 1892, and received his higher education at the Missouri Military Academy. He entered railroad service on June 1 1924, as general agent with the Trinity & Brazos Valley at Fort Worth, Tex. From 1928 to 1934 he served in the same capacity with the Burlington-Rock Island, also at Fort Worth. In 1934 he became general agent of the Fort Worth & Denver City at New Orleans, La., and

he served in this capacity until 1936, when he entered the service of the Chicago, Burlington & Quincy as general freight agent at Denver, Colo. Mr. Armstrong was transferred to St. Louis Mo., in 1939, remaining at that point until March 23, 1943, when he was commissioned a major in the U. S. Army Transportation Corps. His subsequent military duty included assignments at Dallas, Tex., and Camp Plauche, La., after which he served for a year in the European Theatre of Operations. He returned from overseas on September 4, 1945 and rejoined the Burlington lines on October of that year as executive assistant of the F.W. & D.C., at Houston, which post he held at the time of his recent election as vice-president.

S. L. Wright, whose appointment as assistant to president of the Texas & Pacific, at New Orleans, La., was reported in *Railway Age* of February 14, was born at Jonesboro, Ark., on September 13, 1906, and was educated in the public schools at Paris, Tex. He joined the T. & P. in 1923 as a clerk in the latter city, and subsequently advanced through various clerical posi-



S. L. Wright

tions, there, and at Texarkana, Tex., and Dallas. Mr. Wright was appointed soliciting freight agent at Pittsburgh, Pa., in 1934, traveling freight agent in 1936, and general agent at Texarkana in 1938. He became executive general at Dallas in 1944, in which capacity he was serving at the time of his recent promotion.

C. D. Johnson, whose retirement as assistant to president of the Texas & Pacific, at New Orleans, La., was reported in *Railway Age* of February 14, was born at Hondo, Tex., on November 5, 1880, and entered the service of the T. & P. in 1896 as a yard clerk at El Paso, Tex. He became clerk in the freight agent's office in 1908, and subsequently advanced to freight agent and trainmaster. Mr. Johnson was appointed assistant superintendent at Fort Worth, Tex., in 1918, and two years later he became general agent at El Paso. He held the latter position until

1941, at which time he was promoted to assistant to president at New Orleans, the post he held at the time of his retirement.

FINANCIAL, LEGAL and ACCOUNTING

G. E. Smell, whose appointment as treasurer and assistant secretary of the Lehigh & New England at Bethlehem, Pa., was reported in *Railway Age* of February 14, was born on August 15, 1888, at Applebachsville, Pa. He was graduated from Bethlehem Business College in 1908 and entered railroad service on April 1, 1913, as stenographer and accountant with the Lehigh Valley at Easton, Pa. Mr. Smell went with the Lehigh & New England on July 16, 1916, as a stenographer and clerk to the assistant superintendent at Bethlehem, becoming stenographer in the office of the superintendent at Bethlehem on March 1, 1917. On February 1, 1918, Mr. Smell became chief clerk to the master mechanic at Pen Argyl, Pa., and was appointed federal treasurer's cashier at Bethlehem on August 15, 1918. He served as cashier and paymaster from March 1, 1920, until his recent election as treasurer and assistant secretary.

R. M. Sutton, whose promotion to assistant general auditor of the Union Pacific at Omaha, Neb., was reported in *Railway Age* of February 14, entered the service of the U. P. in 1915 as a clerk in the passenger accounts department. Mr. Sutton subsequently advanced to head clerk, traveling accountant and



R. M. Sutton

chief clerk, and served as accountant in charge of the dining car and hotel accounting bureau at Ogden, Utah, from 1924 to 1930. He was transferred later to Omaha, becoming auditor of general and station accounts in 1942 and auditor of disbursements in 1946. He was serving in the latter capacity at the time of his recent advancement.

G. A. Smyth, assistant superintendent of pensions of the Canadian Pacific at Montreal, Que., has been appointed

superintendent of pensions and staff registrar, with the same headquarters, succeeding **F. L. Cortis**, who has retired under the pension regulations which he played a large part in establishing in their present form. **T. E. Brady**, assistant staff registrar, has been appointed assistant superintendent of pensions.

J. T. Williams, whose promotion to auditor of the Missouri-Kansas-Texas of Texas, at Dallas, Tex., was reported in *Railway Age* of February 28, was born on October 1, 1894, at Houston, Tex. Mr. Williams began his railroad career with the Texas & Pacific in 1910, in the accounting department, and subsequently held various clerical posi-



J. T. Williams

tions until 1913, when he joined the Katy as division clerk at Dallas. He advanced to special accountant in 1920, to chief clerk to the auditor of revenue in 1921 and to chief clerk—revenue in 1932, which position he held at the time of his recent promotion.

E. M. Kerrigan, whose promotion to auditor of disbursements of the Union Pacific at Omaha, Neb., was reported



E. M. Kerrigan

in *Railway Age* of February 14, became employed by the U. P. in 1927 as secretary to the assistant to the general auditor at Omaha. Mr. Kerrigan was

advanced to accountant in 1943 and to assistant to general auditor in January, 1946. In June, 1946, he became auditor of miscellaneous accounts, which post he held at the time of his recent advancement.

OPERATING

Hugh J. Phillips, whose appointment as general manager of the New York, Ontario & Western at Middletown, N. Y., was reported in *Railway Age* of February 14, was born on April 24, 1898, at Bridgeton, N. J., and was graduated from Lehigh University in 1919. Mr. Phillips entered railroad service in 1919 with the Central of New Jersey and served until 1928 in the engineering and maintenance of way department in charge of tracks, bridges, docks and buildings. From 1928 to 1930 he was employed by the Arthur McMullen Construction Company in charge of the electrification of the New York Central's West Side (New York) freight yards, track and electrical work. He was executive assistant to the chief engineer, Board of Committees, Navigation, City of Jersey City from 1932 to 1935, then becoming assistant engineer, Port of New York Authority, in construction of the Lincoln Tunnel. From 1937 to 1940 Mr. Phillips headed his



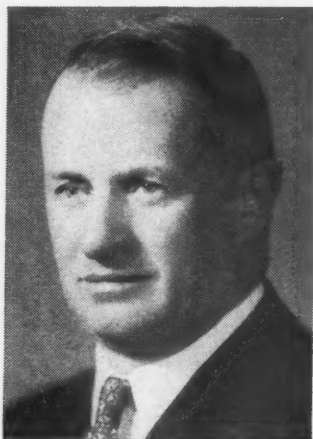
Hugh J. Phillips

own business in Jersey City, N. J., the Phillips Engineering Company, consulting engineer, specializing as tax expert in valuation of railroads and public utilities. He served with the U. S. Army Engineers, from 1940 to 1943, in design and construction of various air bases and gasoline storage depots and ports of debarkation along the Eastern Coast of the United States and Greenland; also in projects in Northwest Canada and Alaska. In 1944 he returned to Phillips Engineering, where, in addition to other commissions, Mr. Phillips was retained by the N.Y.O.&W. to supervise the single tracking program, renovating main line, boiler and erecting shops and the installation of facilities for Diesel power. On January 1,

1946, he was appointed engineer, maintenance of way of the N.Y.O.&W. in complete charge of the engineering and maintenance of way departments.

Robert F. Bauman, whose appointment as assistant to general manager of the New York, Ontario & Western at Middletown, N. Y., was reported in *Railway Age* of February 14, was born on May 4, 1918, at Buffalo, N. Y., and was graduated from Purdue University in 1941. Mr. Bauman entered railroad service in 1936 with the Nickel Plate at Buffalo, serving as switchman during vacations until 1940, when he was appointed transportation apprentice for the chief engineer of the Nickel Plate. From 1941 to 1943 Mr. Bauman was supervisor of the Time Study department of Curtiss-Wright at St. Louis, Mo. then becoming consulting engineer, Stevenson, Jordon & Harrison. In 1945 he became consulting engineer for John J. Thorne, Inc., and a year later he became supervising agent for the N.Y.O.&W., which position he held until his recent appointment as assistant to general manager.

Forrest N. Wiggins, general superintendent, Canadian National Express, with headquarters at Montreal, Que., has been appointed general manager, with the same headquarters, succeeding **Gilbert E. Bellerose**, who has retired under the pensions plan of the company. Mr. Wiggins was born at Malakoff, Ont., on October 8, 1886, and began his career in 1900 with the Canadian Express Company at Toronto, Ont. From 1907 to 1921 he was with the



Forrest N. Wiggins

Canadian Northern Express at Winnipeg, Man., and Toronto. On September 1, 1921, Mr. Wiggins was appointed general superintendent, Canadian National Express at Moncton, transferring to Montreal in June, 1924.

Mr. Bellerose entered railroad service in 1902 as clerk in the car service department of the Grand Trunk at Toronto, Ont., serving in this capacity until 1903, when he became clerk and messenger, Dominion Express. Subse-

quently, he served with the Great Northern and Dominion Express at various points in Western Canada, British Columbia and northeastern states. In 1917 Mr. Bellerose was appointed traffic supervisor, Canadian Northern Express Company, at Winnipeg, Man., becoming assistant to gen-



Gilbert E. Bellerose

eral manager, Canadian National Express at Winnipeg in 1920. One year later he came general assistant, C.N. Express at Montreal, being appointed general superintendent of transportation in July, 1923; assistant general manager in 1928 and general manager on August 1, 1932.

William O. Horne, whose promotion to superintendent of the Union Pacific, with headquarters at Kansas City, Kan., was reported in *Railway Age* of February 21, was born on August 13, 1894, and entered the service of the U. P. as a messenger in 1911. He subsequently held positions successively as operator, dispatcher and night chief dispatcher until 1934, when he was appointed trainmaster at Salina, Kan. In the following year he was transferred to Kansas City, and in 1939 he became assistant superintendent at Marysville, Kan. Mr. Horne returned to Kansas City in 1941 as assistant superintendent, which position he held at the time of his recent promotion.

TRAFFIC

Charles H. Pistor, whose promotion to assistant freight traffic manager of the Texas & Pacific, with headquarters at Dallas, Tex., was reported in *Railway Age* of February 28, was born on August 23, 1901, at St. Louis, Mo., and received his higher education in law at the Benton College of Law and Washington University, both at St. Louis. He entered railway service there in 1917 as stenographer and secretary to general freight agent of the Mobile & Ohio (now Gulf, Mobile & Ohio), and subsequently became rate clerk with the road. From 1924 to 1928 Mr. Pistor was associated with the Missouri-

22 for the L.&N.

We have recently received an order for twenty-two 2-8-4's from the Louisville & Nashville Railroad Co.

These locomotives will burn coal, will have a working boiler pressure of 265 lb., and, with Boosters, will develop an initial tractive effort of 79,300 lb.

Modern steam locomotives like these will show a good return on their investment — and, with planned scheduling, can deliver more ton-miles of freight per dollar of investment than any other type of motive power.



DIVISIONS: Lima, Ohio — Lima Locomotive Works Division; Lima Shovel and Crane Division. Hamilton, Ohio — Hooven, Owens, Rentschler Co.; Niles Tool Works Co.

PRINCIPAL PRODUCTS: Locomotives; Cranes and shovels; Niles heavy machine tools; Hamilton diesel and steam engines; Hamilton heavy metal stamping presses; Hamilton-Kruse automatic can-making machinery; Special heavy machinery; Heavy iron castings; Weldments.

Kansas-Texas successively as rate clerk, division clerk, chief rate clerk, chief clerk to assistant general freight agent and commerce clerk handling Interstate Commerce Commission cases. In 1928 he joined the T. & P., and subsequently



Charles H. Pistor

held several clerical positions prior to his appointment in 1935 as assistant general freight agent at Dallas. He was further advanced in February, 1947, to general freight agent at Dallas, which post he held at the time of his recent promotion.

Ernest L. Billingsley, whose promotion to freight traffic manager of the Texas & Pacific, with headquarters at Dallas, Tex., was reported in *Railway Age* of February 28, was born on February 10, 1883, in Lee county, Tex., and received his higher education at the Dallas Business University, at Dallas. He entered railway service in 1902 in the accounting department of the T. & P.,



Ernest L. Billingsley

and from 1906 to 1915 he served in the traffic department of that road. In the latter year he entered the employ of the Railroad Commission of Texas, at Austin, Tex., remaining in that position until 1920. Rejoining the T. & P., he became assistant general freight agent at Dallas in 1921 and general freight agent there in 1945. Mr. Billingsley was

further advanced in February, 1947, to assistant freight traffic manager, which position he held at the time of his new appointment.

Michael A. Birnbach, whose appointment as assistant to general traffic manager of the New York, New Haven & Hartford at Boston, Mass., was reported in the *Railway Age* of January 10, was born at Brooklyn, N. Y., in 1910. Mr. Birnbach started his career at New York in 1927 with the New England Steamship Company, a subsidiary of the New Haven, transferring to the traffic department of the New Haven at New Haven, Conn., in 1930. He subsequently served as secretary to the general traffic manager and secretary to the vice-president in charge of traffic. In June, 1941, he was appointed office assistant in the traffic department, which position he held until his recent appointment as assistant to general traffic manager at Boston.

Herbert M. Phillips, whose promotion to freight traffic manager of the Pennsylvania, with headquarters at Detroit, Mich., was reported in *Railway Age* of February 21, first entered the service of the Pennsylvania in 1922. He subsequently held various positions prior to his appointment in 1940 as general



Herbert M. Phillips

freight agent of the Long Island. Mr. Phillips served in the U. S. Army for more than three years during World War II, attaining the rank of lieutenant colonel. On January 1, 1946, he became general freight agent at Chicago, which post he held at the time of his recent appointment.

The following changes have taken place in the freight traffic department, Prairie region, of the Canadian Pacific: **A. M. Shields**, division freight agent at Winnipeg, Man., promoted to the newly created position of general freight agent in charge of sales and service at that point, succeeding to the duties of **A. Ledingham**, who has retired as assistant general freight agent; **F. A. Duff**, district freight agent at Hamilton, Ont., appointed to succeed Mr. Shields; **J. E.**

Lord, chief clerk in the freight traffic department at Winnipeg, appointed assistant general freight agent there succeeding **E. W. Drewe**, advanced to general freight agent at Montreal, Que.; **V. R. Duncan**, district freight agent at Edmonton, Alta., promoted to division freight agent at Calgary, Alta., succeeding **T. Hooks**, appointed general foreign freight agent at Vancouver, B. C.; **H. K. Wright**, city freight agent at Calgary, appointed district freight agent at Edmonton, succeeding Mr. Duncan.

Phil W. Johnston, general passenger agent of the Chicago, Rock Island & Pacific, at Kansas City, Mo., will retire on March 31, after 44 years of service with the road. Also scheduled to retire on March 31 are **Fred W. Duttlinger**, division passenger agent at Little Rock, Ark., after 48 years' service, and **Harry D. Rohm**, division passenger agent at Davenport, Iowa, who has completed 50 years of service with the road.

S. G. Grace, whose promotion to freight manager of the Chicago, Milwaukee, St. Paul & Pacific, at Chicago, was reported in *Railway Age* of February 14, was born on January 27, 1886, at Chicago, and received his higher education at the Armour Institute of Technology. He began his career with the Milwaukee in 1909 as a junior clerk, and subsequently served as tariff

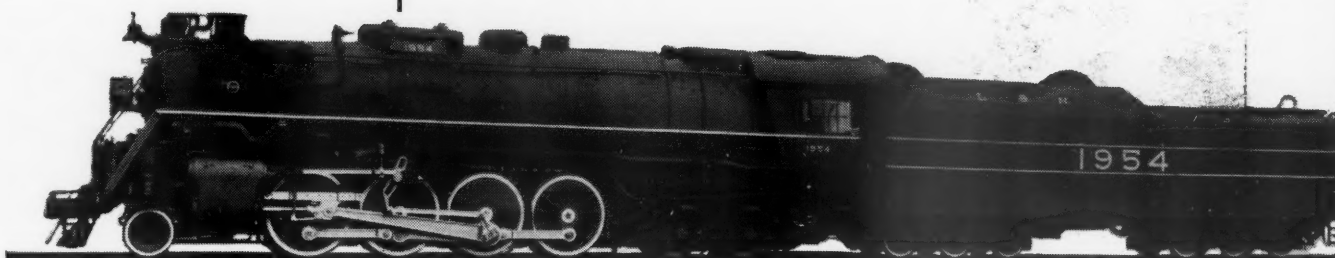


S. G. Grace

and rate clerk and chief clerk. He was promoted to assistant general freight agent in 1925 and to general freight agent in 1938. In 1941 Mr. Grace was further advanced to assistant freight traffic manager, which position he held at the time of his new appointment.

T. L. Vogel, whose promotion to foreign freight traffic manager of the Union Pacific, at Chicago, was reported in *Railway Age* of February 28, was born on July 18, 1903, at Denver, Colo., and began his railroad career in that city with the Denver & Rio Grande Western in 1921, as a clerk in the auditor's office. Mr. Vogel was employed by the Chicago, Burlington & Quincy

22 more with Boosters[®]



No. 1954 is one of 14 Booster-equipped locomotives built for the L & N in 1942, and is similar, in general specifications, to the locomotives on order.

The new locomotives, like the previous 14, will also be equipped with Franklin Type E-2 Radial Buffers and Franklin fire doors.

...for the L&N

The 22 new 2-8-4's, recently ordered by the Louisville & Nashville Railroad Co., will be equipped with Type E-1 Boosters.

These locomotives, designed for heavy freight service, will develop a tractive effort of 65,300 lb. — with an additional 14,000 lb. supplied by the Booster.



FRANKLIN RAILWAY SUPPLY COMPANY

NEW YORK • CHICAGO • MONTREAL

STEAM DISTRIBUTION SYSTEM • BOOSTER • RADIAL BUFFER • COMPENSATOR AND SNUBBER • POWER REVERSE GEARS
AUTOMATIC FIRE DOORS • DRIVING BOX LUBRICATORS • STEAM GRATE SHAKERS • FLEXIBLE JOINTS • CAR CONNECTION

from 1922 to 1925, as assistant cashier and ticket clerk at Denver, after which he joined the U. P. as a ticket clerk at Pasadena, Cal. He was employed from June 11, 1925, to February 1, 1940, in various positions at Los



T. L. Vogel

Angeles, advancing to general agent at Pasadena in the latter year. He was transferred to St. Louis, Mo., in 1944, and in March, 1947, was appointed foreign freight agent at Chicago. Mr. Vogel was serving in the latter position at the time of his recent appointment.

E. H. Gaiennie, traffic manager of the Toledo, Peoria & Western, at Chicago, has been appointed general traffic manager, with headquarters at Peoria, Ill. E. C. Potter, general agent at Chicago, succeeds Mr. Gaiennie as traffic manager.

E. W. Drewe, who has been chairman of the Canadian Freight Association at Montreal, Que., since the first of the year, has been appointed general freight agent of the Canadian Pacific at Montreal, succeeding G. F. Buckingham, whose appointment as freight traffic manager at Winnipeg, Man., was reported in *Railway Age* of March 6. W. M. Jamieson, chief of the tariff and division bureau of the Canadian Pacific at Montreal, has been appointed assistant general freight agent there. N. F. Cowie, district freight agent C.P.R., at Ottawa, Ont., has been appointed division freight agent at Montreal. E. M. Scully, chief clerk in the freight tariff bureau, has been appointed chief of the tariff bureau at Montreal. A. W. Izzard, chief clerk in the division bureau, has been appointed chief of the division bureau at Montreal. W. S. Gourley, traveling freight agent at Ottawa, has been appointed district freight agent there. D. N. Cooper, traveling industrial agent, has been appointed industrial agent at Montreal, covering the Quebec and New Brunswick districts. D. W. Allen, chief clerk for the passenger department at New York, has been appointed assistant general agent, with the same headquarters.

Mr. Drewe entered the service of the

Canadian Pacific in 1912, serving at Winnipeg, Man., and Fort William, Ont. He was assistant general freight agent at Winnipeg for a year before going to Montreal in January as chairman of the Canadian Freight Association. In his new position as general freight agent, Mr. Drewe will oversee rates charged and the distribution of revenue from interline traffic.

Frank S. Inman, commercial agent of the Central of Georgia at Chattanooga, Tenn., has been appointed general agent at Pittsburgh, Pa., succeeding Ansley Cope, resigned.

William Frederick Vitt, assistant general passenger agent of the Missouri Pacific Lines at Memphis, Tenn., has been appointed general agent, passenger department, at New York, succeeding D. I. Lister, who died on January 29. Raymond Theodore Schlude, station passenger agent at St. Louis, Mo., has been appointed district passenger agent at Washington, D. C., succeeding R. L. Preble, resigned.

John H. McLaughlin has been appointed coal freight agent of the Western Maryland at New York and W. P. Ringsdorf has been appointed general agent, freight department, at Pittsburgh, Pa.

George H. Sheridan has been appointed traffic manager of the Canadian National express department, with system jurisdiction, having headquarters at Montreal, Que., succeeding C. W. Smith, who has been appointed superintendent of air and freight traffic. R. A. Gordon has been appointed superintendent of the Atlantic division of the Express department, with headquarters at Moncton, N. B., succeeding F. M. Smith, who has been appointed general superintendent of the Eastern district. Neil McLellan has been appointed assistant superintendent at Moncton.

Joseph E. Little, district freight agent of the Pennsylvania at New Haven, Conn., has been transferred to San Francisco, Cal., succeeding W. K. Chapman, whose promotion to division freight agent at Washington, D. C., was reported in *Railway Age* of March 20, page 110.

Harvey W. Shaefer, district freight agent of the Southern system at Lynchburg, Va., has been promoted to division freight agent, with the same headquarters. Gordon W. Lindsay, commercial agent at Memphis, Tenn., has been promoted to general agent at Gastonia, N. C.

Henry W. Large, whose promotion to general coal traffic manager of the Pennsylvania system at Philadelphia was reported in *Railway Age* of February 21, was born at Philadelphia and was graduated from Lawrenceville School and Princeton University. He started his railroad career in 1928 as a clerk in the passenger traffic department of

the Pennsylvania at Philadelphia and after varied experience in many clerical and other positions, he was advanced to division freight agent at Wilmington, Del., in 1936, later transferring to Cincinnati, Ohio. Mr. Large became general coal freight agent at Chicago in 1939 and advanced to freight traffic manager at Detroit in 1945. During the war, Mr. Large served in the Navy, and in 1942 and 1943 was attached to the Naval Air Station at Daytona Beach, Fla., as operations officer and then executive officer. In 1944 he joined the U.S.S. Shangri-la where he remained until October 18, 1945, when he was discharged with the rank of commander.

D. W. Johnston, special freight traffic representative of the Canadian Pacific, has been appointed general freight agent, rates and divisions, with headquarters at Montreal, Que. Mr. Johnston has been with the freight traffic department of the C.P.R. at Montreal since 1911, serving as assistant general freight agent from 1930 to 1941 and as special freight traffic representative for the past seven years.

MECHANICAL

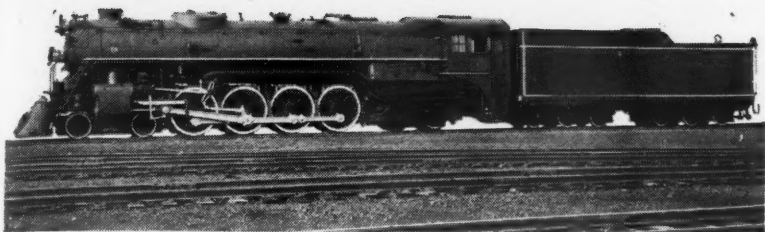
R. R. McKinney, master mechanic of the Williamsport and Wilkes-Barre divisions of the Pennsylvania, with headquarters at Renovo, Pa., has been transferred to the Philadelphia division at Harrisburg, Pa.

L. E. Hilsabeck, whose promotion to superintendent, car department, of the Chicago Great Western, with headquarters at Oelwein, Iowa, was reported in the *Railway Age* of February 14, was born on November 4, 1898, at Marshalltown, Iowa. He began his

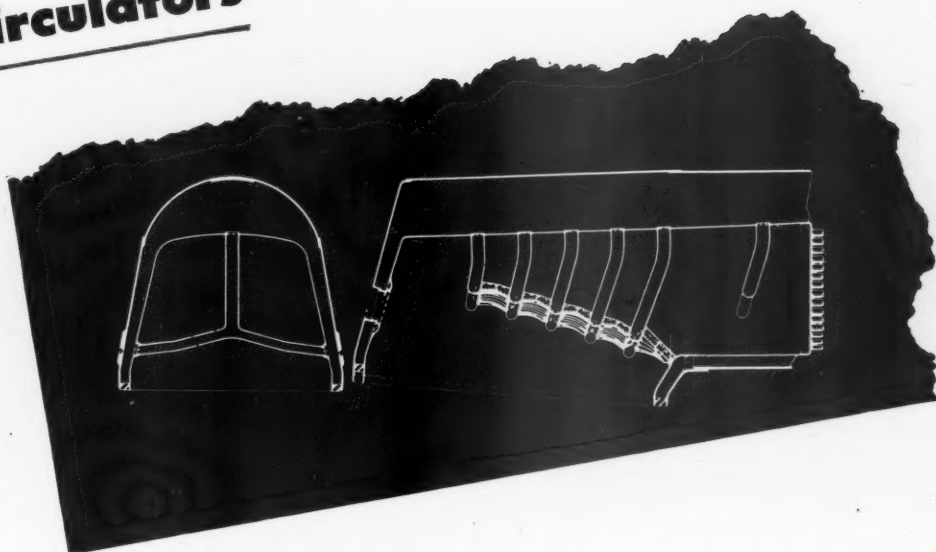


L. E. Hilsabeck

railroad career with the Great Western in 1915 as a car repair helper at Oelwein, serving until 1917, when he joined the Navy for service during World War I. Re-entering the railroad's service in 1919, Mr. Hilsabeck held various positions in the road's car department until 1931, at which time he



Heavy freight locomotives are being equipped with Security Circulators



Typical of the trend toward the use of Security Circulators in modernizing existing steam locomotives, many 4-8-4 freight locomotives are being Circulator-equipped.

In making such installations in existing motive power, the Security Circulators, as shown by the sketch, are suitably proportioned to the size and type of boiler to give the best results in bettering boiler performance and increasing locomotive utilization.

AMERICAN ARCH COMPANY, Inc.

NEW YORK • CHICAGO

SECURITY CIRCULATOR DIVISION

was appointed inspector foreman at the Oelwein terminal. He later became car foreman and general car inspector, and in 1941 was appointed assistant superintendent, car department, at Oelwein. In 1943 he was commissioned in the Navy, remaining on active duty in the European and Mediterranean theatres until July, 1946. At that time he rejoined the Great Western as assistant superintendent, car department, at Oelwein, which post he held at the time of his recent appointment.

PURCHASES and STORES

Earl G. Roberts, whose appointment as stores manager of the Chicago, Rock Island & Pacific, at Chicago, was reported in *Railway Age* of February 7, was born at Princeton, Mo., on June 19, 1889, and entered railway service in March, 1907, as a station helper on the Illinois division of the Rock Island. During the next few years he served successively as telegraph operator on the Illinois division, clerk at Shawnee, Okla., storekeeper at Blue Island, Ill., telegraph operator on the Illinois division, and clerk at Silvis. In June, 1911,



Earl G. Roberts

he left the service of the Rock Island to enter business, but returned to his last-held position in February, 1913. In May, 1913, he was promoted to storekeeper at Trenton, Mo., and a year later he was transferred to Valley Junction, Iowa. Mr. Roberts was appointed chief clerk to the general storekeeper at Silvis in April 1931, and in January, 1938, he was appointed traveling storekeeper, with the same headquarters. He was further advanced in 1939 to general storekeeper at Silvis, which position he held at the time of his recent promotion.

Ottis O. Albritton, whose appointment as director of purchases and stores of the Illinois Central, with headquarters at Chicago, was reported in *Railway Age* of March 6, was born at McComb, Miss., on December 27, 1899, and entered railway service in October 1918, as a laborer on the I.C. at McComb.

Later he served as stockman, clerk, stockkeeper, line stockkeeper, foreman and general foreman, with the same headquarters, until May 1, 1934, when he was promoted to chief clerk to the division storekeeper at McComb. On January 1 1940, Mr. Albritton was ap-



Ottis O. Albritton

pointed a special clerk in the office of the general storekeeper at Chicago, and one year later he was advanced to division storekeeper, with headquarters at Memphis, Tenn. He was further promoted in August, 1945, to assistant to vice-president, purchases and stores, at Chicago which position he held at the time of his recent appointment.

ENGINEERING and SIGNALING

Harry T. Livingston, whose appointment as chief engineer, maintenance of way and structures, of the Chicago, Rock Island & Pacific, was reported in *Railway Age* of January 31, was born on November 10, 1888, at Golden City,



Harold T. Livingston

Mo. Mr. Livingston received his higher education at the University of Missouri, having been awarded a B.S. degree in civil engineering in 1908. He began his railroad career with the St. Louis-San Francisco as a chairman during sum-

mer vacation while attending college, and in the year following his graduation he became an inspector on construction with the Southern Pacific. Shortly thereafter, he joined the Rock Island as instrumentman, and in 1910 was appointed assistant engineer. He served as division engineer and master carpenter for two years prior to entering military service in World War I, during which he attained the rank of captain in the engineer corps. Returning to the road in 1919, he held positions as division engineer, engineer of construction, assistant superintendent, district maintenance engineer and superintendent. In August, 1939, Mr. Livingston was appointed engineer of bridges, the post he held at the time of his recent appointment.

M. W. Clark, principal assistant engineer of the Atlantic Coast Line, has been appointed assistant chief engineer, with headquarters as before at Wilmington, N. C. W. L. Hartzog, Jr., assistant engineer bridges, has been appointed principal assistant engineer, with headquarters as before at Wilmington. R. I. Simkins has been appointed assistant to engineer of bridges, at Wilmington.



M. W. Clark

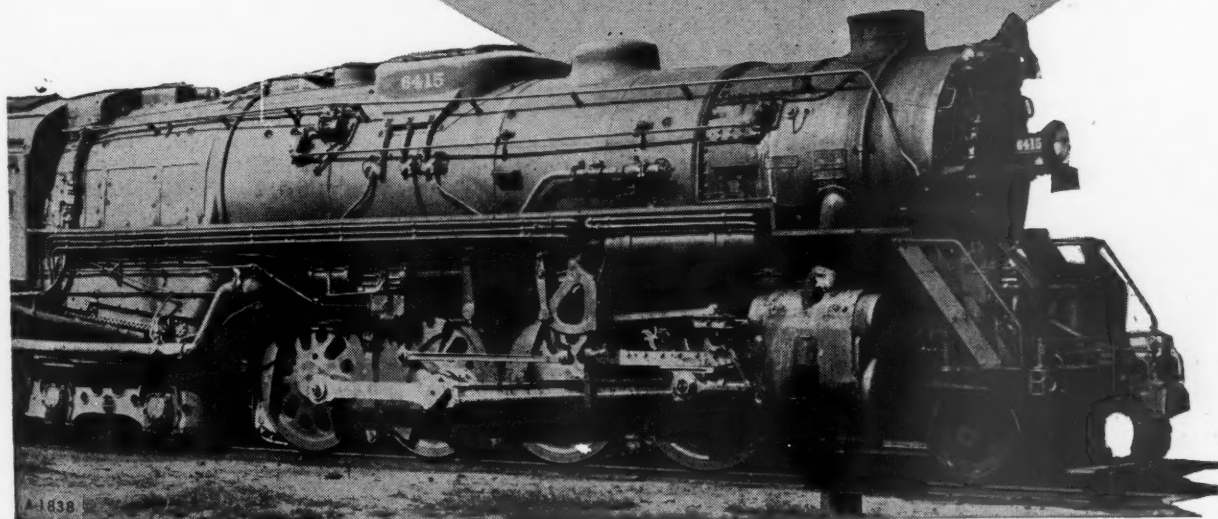
Mr. Clark was born at Savannah, Ga., on April 5, 1908, and was graduated from Citadel, Charleston, S. C., with the degree of bachelor of science in civil engineering. He entered the service of the Atlantic Coast Line as chairman in the valuation department at Wilmington on June 15, 1930. He was appointed rodman at Jacksonville, Fla., the following September 15, becoming junior draftsman at Wilmington three months later. On September 1, 1935, he became senior draftsman and on February 1, 1936, assistant supervisor building repairs at Rocky Mount, N. C. Mr. Clark was appointed junior engineer at Wilmington on February 1, 1937, and 14 months later he became assistant engineer at Savannah, Ga. On February 1, 1939, he was appointed office engineer at Savannah, becoming supervisor building repairs there on October 16, 1944. Five months later Mr.

THE Throttle MASTER

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- LESSENS TIRE WEAR
- LOWERS MAINTENANCE ON RECIPROCATING PARTS
- and — REDUCES WEAR AND TEAR ON RAILS

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122 S. Michigan Avenue, Chicago 3, Ill.



Clark went to Wilmington as office engineer, and in April, 1947, he was appointed principal assistant engineer, which position he held until his recent appointment as assistant chief engineer.

Mr. Hartzog was graduated from the University of South Carolina with a degree in civil engineering and entered the service of the Atlantic Coast Line in 1926 as a draftsman in the bridge department, office of the chief engineer,



W. L. Hartzog, Jr.

at Wilmington. He was subsequently advanced to junior engineer, senior assistant engineer, and engineer of design, which post he left in 1942, to accept a commission as captain in the 703rd Railway Grand Division, the A. C. L.-sponsored unit of Military Railway Service. He was promoted to major in July, 1943, and appointed chief of maintenance, engineer bridges and building, headquarters 1st Military Railway Service, and served in North Africa, Italy, and Eastern France until December, 1944, when he was injured, relieved of assignment, and returned to the states for hospitalization. At the time of his separation from the service he held the rank of lieutenant-colonel, Corps of Engineers. Mr. Hartzog returned to the Atlantic Coast Line on March 1, 1946, as assistant engineer bridges at Wilmington, which position he held until his recent promotion.

H. M. Shepard, assistant engineer of the Erie, has been appointed assistant to chief engineer, with headquarters as before at Cleveland, Ohio. B. Elkind, office engineer, has been appointed principal assistant engineer, with headquarters as before at Cleveland. L. S. Rose, assistant engineer, has been appointed special engineer, with headquarters as before at Cleveland, succeeding H. F. King, who has retired under the pension rules of the company, after 36 years of service.

Albert A. Johnson, engineer of maintenance of way of the Delaware, Lackawanna & Western, has been promoted to assistant chief engineer, with headquarters as before at Hoboken, N. J. John P. Hiltz, engineer of track, at

Scranton, Pa., has been promoted to engineer of maintenance of way at Hoboken.

Frank L. Guy, engineer in charge of maintenance of way and structures of the Southern Pacific, with headquarters at San Francisco, Cal., will retire on March 31.

SPECIAL

E. A. Koier, general attorney of the Pennsylvania, has been appointed director of public relations, with jurisdiction over the activities of the company in the public relations field, and reporting directly to the president.

W. A. Crawford, editor of the Central of Georgia Magazine for the past 18 years, with headquarters at Savannah, Ga., has left the Central of Georgia to become executive secretary of the Railroad Association of Georgia, with headquarters at Atlanta, Ga. Prior to becoming editor of the magazine, Mr. Crawford served for about eight years in the road's passenger traffic and executive departments. He was president of the American Railway Magazine Editors Association in 1940.

Howard Skidmore, formerly of the staff of the New York Herald Tribune, has joined the Chesapeake & Ohio as assistant to director of public relations at New York.

James R. Brugger, who has been a member of the faculty of Gannon College, Erie, Pa., has been appointed public relations representative of the New York Central at Cleveland, Ohio. His territory will include the state of Ohio and parts of Pennsylvania and Michigan.

D. C. Alexander has been appointed manager of the employees' suggestion system of the Chesapeake & Ohio's Pere Marquette district, with headquarters at Detroit, Mich.

E. B. Kurtz, assistant chief special agent of the Missouri Pacific, with headquarters at Kansas City, Mo., has been transferred to Little Rock, Ark., succeeding R. M. Hope, who has been assigned other duties. Mr. Kurtz is succeeded by O. A. Peterson, special agent at Falls City, Neb.

OBITUARY

Walter H. Edmondson, assistant general manager of the Grand Trunk Western, at Detroit, Mich., whose death was reported in *Railway Age* of March 13, was born on October 22, 1888, at Detroit. He began his railroad career in that city in 1904, as a messenger in the freight office of the Grand Trunk (now G. T. W.). Mr. Edmondson subsequently held various clerical positions in Chicago, Battle Creek, Mich., and Detroit, and advanced to assistant to federal manager at Detroit in 1919. He

was appointed assistant to general manager in 1920, and went to Battle Creek in 1939 as superintendent. He returned to Detroit in 1942 as general superintendent, and was further advanced in 1944 to assistant general manager, the position he held at the time of his death.

Sydney R. Prince, who retired on January 1, 1947, as general counsel of the Southern system, died on March 19 at a hospital in Tampa, Fla., at the age of 71. Mr. Prince resided at Chevy Chase, Md., and was visiting in Florida to recuperate from a long illness. A native of Alabama, he was graduated from the University of Alabama and received his LL.B. degree from Georgetown University Law School. He was admitted to the practice of law in Alabama on December 30, 1898 and practiced in Mobile from 1898 to 1900 with his father under the firm name of Prince & Prince. In 1901, he became connected with the law department of the Mobile & Ohio (now Gulf, Mobile & Ohio) as personal injury attorney and served successively as attorney and assistant general counsel, becoming general counsel in 1911. On July 1, 1918, he was appointed general solicitor of the Southern system and certain other railroads under the U.S. Railroad Administration, with headquarters at Washington. With the ending of federal control of railways in 1920, Mr. Prince became general solicitor of the Southern system. In January, 1932, he was promoted to general counsel, which position he held until his retirement.

Edward S. O'Brien, general agent of the Western Pacific, with headquarters at Pittsburgh, Pa., died at a hospital in that city on March 16.

Walter D. Pearce, division superintendent of the Northern Pacific, with headquarters at Minneapolis, Minn., died suddenly of a heart attack on March 19, at the Northern Pacific hospital in St. Paul, Minn. Mr. Pearce was born at Ligonier, Ind., on April 23, 1886, and received his higher education at Purdue University. He entered the service of the N. P. as a rodman in 1906, transferred to the operating department in 1918, and advanced later to general manager of the Walla Walla (an N. P. subsidiary). He was appointed assistant superintendent of the N. P., at Duluth, Minn., in 1926, and later held positions as assistant superintendent at St. Paul, superintendent of the Spokane, Portland & Seattle at Portland, Ore., and superintendent of the N. P., successively, at Glendive, Mont., and Fargo, N. D. Mr. Pearce had served at superintendent at Minneapolis since October 1, 1946.

W. E. Babb, who retired in 1942 as publicity manager of the Chicago, Rock Island & Pacific, at Chicago, died in Puente, Cal., on March 20.

INFORMATION

ARRIVING TRAINS

TRAIN	FROM	DUE TO ARRIVE	WILL ARRIVE	EXIT GATE
sunset	26	11:00 am	On Time	D
flyer	324	11:10 am	On Time	a
limited	35	11:40 am	On T	

Good News for Travelers

that Good Brakes help to write

Next to a top safety record, railroad men are generally proudest of a blue-ribbon record for maintaining schedules. The "On Time" chalked on the announcement board is a big factor in winning passenger patronage and building good will.

Westinghouse HSC electro-pneumatic air brake equipment helps many famous trains to build reputations for dependability. In application and release, the impulse travels the length of the train in the wink of an eye. Braking pressures are equalized automatically on all cars in the train.

The engineman can make a later application in approaching restricted speed zones, and a quicker release in leaving. Running time can be substantially reduced without increasing top speed.

For your modern passenger trains, use this modern combination: HSC AIR BRAKES . . . for braking flexibility to match modern train speeds, and unequalled smooth action. SPEED GOVERNOR CONTROL . . . for regulating brake forces to wheel speeds. AP DECELOSTAT . . . for wheel slip detection to keep the wheels rolling.



✕ Westinghouse Air Brake Co.

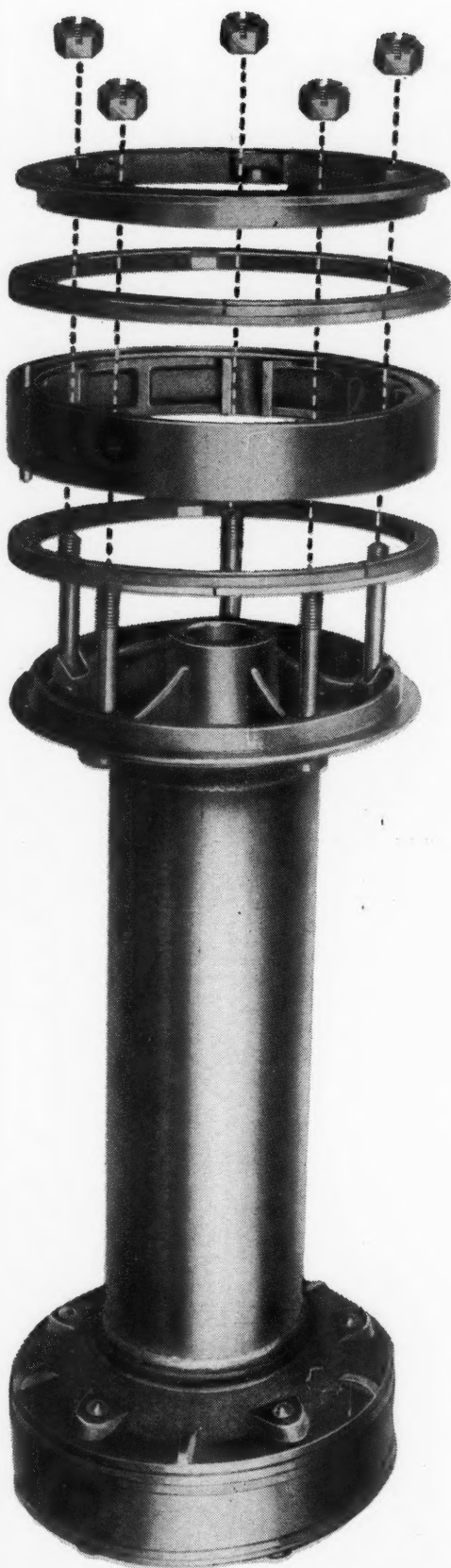
WILMERDING, PA.

REVENUES AND EXPENSES OF RAILWAYS

MONTH OF JANUARY, 1948

Av. mileage operated during period	Name of road	Operating revenues				Maintenance of—		Operating expenses		Operating ratio	Net from railway operation		New railway operating income	
		Freight	Passenger	Total (inc. misc.)	Way and structures	Traffic	Transportation	Total	tax accruals		1948	1947		
171	Akron, Canton & Youngstown	\$468,079	64	\$468,143	\$82,458	\$24,144	\$147,519	\$300,881	\$77,044	61.3	\$190,105	\$89,782	\$84,655	
13,081	Atchafalaya, Topeka & Santa Fe System	32,047,856	4,133,116	36,180,972	5,386,331	7,140,543	887,659	29,824,717	4,357,543	75.2	9,861,246	5,390,929	4,429,698	
82	Atlanta & St. Andrews Bay	175,882	1,106	183,050	18,956	18,071	6,438	106,711	31,568	58.3	76,339	35,774	25,469	
93	Atlanta & West Point	277,774	60,947	338,721	33,650	13,700	196,358	321,250	64,321	83.3	13,700	34,949	4,335	
133	Western Alabama	266,956	62,537	329,493	37,726	13,241	132,821	288,511	45,720	78.8	77,442	45,720	16,734	
5,572	Atlantic Coast Line	9,321,812	2,166,921	11,488,733	1,955,761	1,722,849	318,159	5,139,328	1,100,000	77.4	2,835,650	1,337,212	1,039,369	
343	Charleston & Western Carolina	412,875	9,329	422,204	77,336	77,336	14,125	177,003	348,249	81.1	81,021	30,000	44,245	
6,191	Baltimore & Ohio	27,366,869	2,005,145	29,372,014	3,104,652	3,681,304	344,883	14,454,168	2,433,088	83.2	5,218,895	2,652,648	2,735,243	
29	Staten Island Rapid Transit	180,400	113,678	294,078	65,776	43,528	1,619	173,911	42,943	101.9	5,741	75,004	51,965	
602	Bangor & Aroostook	1,357,752	48,243	1,406,000	244,261	192,747	7,392	426,101	244,225	62.1	557,294	304,744	158,444	
214	Bessemer & Lake Erie	1,016,996	1,433	1,018,429	126,838	17,479	380,002	1,067,962	167,043	103.2	33,584	182,011	290,587	
1,757	Boston & Maine	5,355,499	1,314,538	6,670,037	1,963,003	1,252,459	102,014	3,442,097	580,064	98.8	57,686	950,838	279,887	
228	Burlington-Rock Island	247,157	46,859	294,016	53,488	29,672	4,840	64,320	11,146	81.5	57,698	11,146	5,977	
35	Cambria & Indiana	139,307	...	139,307	12,933	102,957	861	24,145	150,168	107.8	10,817	69,356	66,756	
234	Canadian Pacific Lines in Maine	578,158	43,147	621,305	74,378	82,549	4,513	262,468	436,711	67.3	212,602	79,273	73,686	
90	Canadian Pacific Lines in Vermont	168,766	16,749	185,515	49,342	33,598	2,932	161,637	254,036	122.5	40,587	19,625	113,834	
1,815	Central of Georgia	2,463,516	262,110	2,725,626	466,315	486,809	102,982	1,492,695	271,011	90.2	294,746	262,951	191,823	
418	Central of New Jersey	2,462,977	551,006	3,013,983	522,681	610,786	53,498	1,921,095	441,459	101.6	53,462	441,459	506,634	
213	Central of Pennsylvania	1,487,719	22,018	1,509,737	143,315	335,024	23,877	596,389	80,109	76.7	346,601	544,489	619,203	
422	Central Vermont	611,000	71,000	682,000	120,720	151,121	12,443	374,243	695,307	95.0	36,693	55,830	49,022	
5,062	Chesapeake & Ohio	24,981,342	905,158	25,886,500	4,032,536	5,382,881	717,357	10,629,726	3,020,241	81.7	4,925,942	2,536,083	4,501,943	
909	Chicago & Eastern Illinois	2,034,202	321,026	2,355,228	294,382	498,543	89,534	1,179,570	199,000	85.3	381,307	146,275	7,117	
131	Chicago & Illinois Midland	709,944	892	710,836	92,086	134,330	31,762	186,166	478,298	65.1	255,943	158,275	113,736	
8,058	Chicago & North Western	10,645,422	1,845,402	12,490,824	2,278,748	3,231,250	319,927	7,219,554	1,151,022	96.9	6,638,190	1,151,022	1,068,776	
8,867	Chicago, Burlington & Quincy	15,692,212	1,564,063	17,256,275	2,284,677	2,716,385	409,736	7,168,495	2,828,718	69.5	5,822,702	2,520,598	3,130,288	
1,500	Chicago Great Western	2,372,384	54,980	2,427,364	19,064,900	2,284,677	7,168,495	13,242,198	2,828,718	69.5	5,822,702	2,520,598	3,130,288	
541	Chicago, Indianapolis & Louisville	1,226,215	91,207	1,317,422	299,451	342,498	93,561	1,306,935	206,878	79.7	545,065	176,569	169,912	
10,671	Chicago, Milwaukee, St. Paul & Pacific	15,810,688	1,638,106	17,448,794	2,850,496	3,517,364	397,962	9,705,020	1,494,000	80.8	2,034,507	1,494,000	1,802,674	
7,650	Chicago, Rock Island & Pacific	11,996,031	1,928,713	13,924,744	1,654,496	2,523,339	444,283	6,638,190	1,477,007	79.0	3,181,230	1,059,547	1,802,674	
1,617	Chicago, St. Paul, Minn. & Omaha	2,200,134	204,014	2,404,148	372,192	443,313	55,917	1,488,194	2,470,205	93.7	167,215	209,845	32,404	
317	Cincinnati	1,692,934	5,627	1,698,561	163,800	291,789	31,700	566,650	1,083,330	63.3	628,830	164,512	755,003	
745	Colorado & Southern	963,205	102,619	1,065,824	130,865	203,775	23,069	506,465	131,901	78.1	255,703	74,906	44,221	
902	Ft. Worth & Denver City	979,958	157,115	1,137,073	126,604	136,604	18,072	471,030	122,028	75.8	299,510	122,028	121,348	
41	Colorado & Wyoming	146,726	...	146,726	10,095	11,691	418	83,088	53,934	52.8	108,230	53,760	17,743	
168	Columbus & Greenville	133,160	1,314	134,474	33,849	24,659	4,530	45,340	113,342	84.0	23,553	15,138	...	
974	Delaware & Hudson	4,221,549	170,759	4,392,308	520,022	63,604	1,936,417	2,735,748	466,980	82.9	769,566	349,218	375,733	
973	Delaware, Lackawanna & Western	5,450,604	951,039	6,401,643	874,100	1,117,324	145,271	3,506,972	634,631	84.7	1,060,372	386,002	486,733	
2,443	Denver & Rio Grande Western	4,853,108	241,650	5,094,758	510,273	139,631	2,049,463	3,727,208	626,096	70.5	1,563,277	626,096	314,006	
230	Detroit & Mackinac	163,285	955	164,240	32,500	39,108	1,221	82,758	35,036	53.1	82,758	47,509	31,252	
50	Detroit & Toledo Shore Line	631,542	...	631,542	39,292	38,984	12,030	185,559	286,381	45.2	347,321	101,114	107,446	
464	Detroit, Toledo & Ironton	1,249,811	723	1,250,534	132,636	193,408	21,178	345,595	727,183	55.5	582,283	226,908	319,748	
569	Duluth, Mississippi & Iron Range	121,203	2,306	123,509	385,646	407,710	6,621	406,749	86,233	79.9	1,104,794	86,233	1,214,096	
175	Duluth, Winnipeg & Pacific	365,000	1,800	366,800	45,363	48,685	3,455	170,321	274,616	73.7	97,784	41,792	15,216	
391	Elgin, Joliet & Eastern	3,033,014	...	3,033,014	222,682	494,666	23,053	1,572,404	2,408,518	67.8	1,145,414	491,924	353,069	
2,229	Erie	11,541,969	694,004	12,235,973	1,400,408	2,371,163	285,359	6,143,198	10,825,041	83.7	2,108,702	11,135,926	836,033	
575	Florida East Coast	1,840,225	934,994	2,775,219	321,127	422,556	70,476	1,811,954	2,201,616	72.0	855,285	249,802	562,318	
326	Georgia & Florida	613,199	32,986	646,185	86,449	108,199	28,673	361,428	46,947	88.9	76,675	46,947	51,563	
408	Georgia & Alabama	215,828	2,029	217,857	30,394	54,661	1,967	93,315	16,770	88.9	24,920	16,770	5,686	
972	Grand Trunk Western	3,468,000	182,000	3,650,000	607,502	755,462	54,205	1,953,703	275,735	90.9	353,497	275,735	110,303	
172	Canadian Natl. Lines in New Eng.	164,000	7,300	171,300	56,125	30,778	2,825	136,817	25,372	123.8	45,216	25,372	110,382	
8,333	Great Northern	12,772,116	927,093	13,699,209	2,542,743	2,817,169	311,202	6,336,990	1,514,156	86.0	2,059,373	1,514,156	163,413	
2,224	Green Bay & Western	275,325	40	275,365	49,042	35,074	18,842	209,926	43,502	74.7	71,031	43,502	13,157	
2,906	Gulf, Mobile & Ohio	5,532,229	542,838	6,075,067	1,135,597	1,131,977	231,870	2,210,758	535,971	78.0	1,439,140	613,654	393,313	
37	Houston & Brazos Valley	132,700	1,495	134,195	53,677	1,943	33,533	56,574	32,324	41.9	38,428	32,324	41,508	
6,581	Illinois Central	16,721,660	1,947,580	18,669,240	3,191,033	3,934,462	390,534	8,706,937	2,125,935	82.8	3,565,985	1,230,103	1,964,659	
474	Illinois Terminal	770,552	109,519	880,071	135,354	141,223	29,886	397,618	112,924	75.46	241,034	96,301	141,466	
890	Kansas City Southern	2,906,618	90,480	3,000,098	266,904	389,289	85,664	978,764	542,000	56.4	1,418,732	542,000	736,950	
328	Kansas, Oklahoma & Gulf	432,569	997	433,566	432,569	432,569	1,823	432,569	72,704	56.1	192,774	72,704	95,681	
156	Lake Superior & Ishpeming	50,198	93	50,291	31,324	55,607	1,402	38,428	25,101	254.7	38,428	15,401	78,068	
96	Lehigh & Hudson River	252,622	...	252,622	42,061	44,301	7,790	119,009	22,605	87.8	30,923	25,372	31,647	
193	Lehigh & New England	578,041	...	578,041	583,651									

203,951
 249,941
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 65,201
 1,293,428
 175,657
 1,390,044
 14,657,597
 1,979,431
 756
 4,759
 988
 Louisiana & Arkansas
 Louisville & Nashville
 Maine Central
 1948



HOW EASY

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Packing Rings on HUNT-SPILLER

Light Weight Steel Valves!

There is a better and different light weight steel valve, and its advantages are apparent to any shop man at a glance. Made by Hunt-Spiller of electric furnace cast steel, its distinguishing feature is the method of applying packing and bull rings. The spool is a single welded unit which remains permanently on the valve stem. To free the packing rings, simply remove the five nuts on each end. The whole job is done in much less time; the locomotive returns to service sooner. Ask the Hunt-Spiller representative to tell you more. Hunt-Spiller Mfg. Corporation, 383 Dorchester Ave., Boston 27, Mass. In Canada: Joseph Robb & Co. Ltd., 4050 Namur St., Montreal 16, P.Q. Export Agents: International Ry. Supply Co., 30 Church St., New York 7, N. Y.

Hunt-Spiller are exclusive railroad sales representatives for Double Seal Piston Rings made for Diesel and other services. Double Seal rings are cast from Hunt-Spiller Air Furnace Gun Iron.

HUNT-SPILLER

**LIGHT WEIGHT
STEEL PISTONS AND VALVES
DUPLEX SECTIONAL PACKING
AIR FURNACE GUN IRON**

REVENUES AND EXPENSES OF RAILWAYS

MONTH OF JANUARY, 1948

Name of road	Av. mileage operated during period	Operating revenues			Operating expenses			Operating ratio	Net from railway operation	Net railway operating income	
		Freight	Passenger	Total (inc. misc.)	Way and structures	Equip-ment	Traffic			1948	1947
Midland Valley,	334	\$184,924	10	\$188,798	\$31,183	\$12,937	\$2,560	58.4	\$78,571	\$28,428	\$26,615
Minneapolis & St. Louis,	1,408	1,449,537	7,053	1,508,458	473,807	246,720	103,778	83.3	1,266,698	163,278	177,381
Minneapolis & St. Paul & S. Marie,	3,225	2,079,950	99,081	2,337,693	242,300	573,881	60,259	108.7	1,204,435	396,666	34,683
Duluth, South Shore & Atlantic,	530	446,016	10,643	478,398	85,598	221,219	16,778	87.0	62,407	28,752	19,420
Spokane International,	152	140,873	1,375	153,620	31,301	17,028	3,874	79.6	31,360	11,577	10,996
Mississippi Central,	148	174,476	—	174,476	36,701	14,489	11,854	66.3	59,774	20,297	23,257
Missouri & Arkansas,	365	—	5,340	5,340	6,732	—	—	100	—	2,102	—
Missouri-Illinois,	172	361,522	234	363,988	45,526	41,642	6,504	54.3	166,512	70,804	44,710
Missouri-Kansas-Texas Lines,	3,253	4,985,978	405,714	5,395,486	854,678	898,623	223,131	81.3	1,090,119	498,577	322,101
Missouri Pacific,	7,012	14,472,087	1,118,759	17,179,801	2,373,850	2,921,521	402,807	80.4	3,366,821	1,116,777	2,155,569
Gulf Coast Lines,	1,735	3,950,987	91,474	4,210,027	724,505	432,968	82,692	64.3	1,505,120	439,289	695,504
International-Great Northern,	1,110	2,312,732	227,489	2,800,658	441,776	423,994	50,334	58.4	1,295,184	145,418	145,418
Monongahela,	170	733,813	1,296	738,924	72,720	66,182	873	53.3	344,913	107,418	187,164
Montour,	51	251,848	—	251,848	19,958	64,578	780	75.0	63,342	36,538	68,441
Nashville, Chattanooga & St. Louis,	1,051	2,503,748	—	2,503,748	463,695	517,759	103,009	81.7	555,339	313,428	205,807
New York Central,	10,746	42,047,969	11,323,695	59,324,854	8,078,532	13,303,327	997,435	92.6	4,402,179	4,086,465	2,358,250
Pittsburgh & Lake Erie,	223	3,125,536	105,728	3,381,475	404,013	969,093	59,530	86.7	1,347,601	2,933,236	436,603
New York, Chicago & St. Louis,	1,686	7,173,653	150,186	8,304,450	1,076,148	1,327,173	212,795	74.6	3,279,180	6,195,699	799,872
New York, New Haven & Hartford,	1,838	7,292,043	4,952,997	13,467,349	2,777,749	1,951,716	219,803	91.3	1,171,167	1,070,000	1,147,506
New York Connecting,	21	187,773	—	187,773	58,688	13,454	—	65.3	68,745	63,229	41,255
New York, Ontario & Western,	544	499,985	5,188	555,810	112,648	115,951	27,149	117.8	—	52,093	—
New York, Susquehanna & Western,	120	321,225	50,052	383,378	59,680	43,831	5,397	85.0	46,017	39,940	3,540
Norfolk & Western,	2,129	14,651,122	523,271	15,699,230	1,904,184	2,839,737	257,646	87.3	5,130,228	2,863,775	3,013,802
Norfolk Southern,	7,727	698,863	1,094	723,475	150,762	79,143	38,435	84.0	1,113,228	51,555	41,010
Norfolk Southern,	6,909	9,998,344	560,754	11,515,564	2,095,976	2,454,643	234,583	88.7	1,306,681	1,293,867	241,367
Northern Pacific,	331	527,438	6,965	555,705	156,257	73,943	4,526	95.2	285,202	529,127	54,575
Northwestern Pacific,	132	77,549	—	77,549	16,381	6,676	1,431	83.2	22,913	8,467	16,443
Oklahoma City-Ada-Toka,	10,108	57,200,225	13,793,312	77,374,173	8,339,172	17,568,116	1,160,107	96.3	9,070,395	7,566,519	1,159,962
Pennsylvania,	376	1,080,851	2,486,860	3,769,167	796,405	847,900	16,667	107.2	272,242	508,074	794,068
Pennsylvania-Reading Seashore Lines,	389	532,496	199,836	769,167	205,315	132,963	10,012	123.3	—	114,402	—
Pittsburgh & Shawmut,	97	233,720	—	233,720	31,867	36,125	3,209	66.9	77,618	8,061	60,395
Pittsburgh & West Virginia,	135	622,835	—	622,835	64,422	122,965	39,130	68.4	206,555	103,733	88,520
Reading,	1,353	8,914,982	699,671	10,110,809	1,763,747	2,053,474	134,386	85.8	1,436,225	809,165	478,037
Richmond, Fredericksburg & Potomac,	118	1,441,512	697,812	2,352,265	260,752	285,126	18,373	71.0	682,975	310,639	275,638
Rutland,	407	320,760	43,635	439,776	77,443	113,374	13,384	114.0	—	39,808	—
Sacramento Northern,	269	124,583	—	124,583	83,943	18,034	2,935	137.7	—	16,680	—
St. Louis-San Francisco,	4,645	7,568,883	689,481	8,982,570	1,355,651	1,538,197	228,592	85.4	1,307,440	817,829	550,958
St. Louis, San Francisco & Texas,	1,600	355,172	8,536	382,040	48,233	32,324	7,155	71.84	107,589	41,871	40,481
St. Louis Southwestern Lines,	1,575	4,733,339	53,300	4,952,341	385,036	594,283	133,210	66.1	1,974,926	825,946	974,833
Seaboard Air Line,	4,152	9,233,131	1,061,614	11,773,604	1,630,828	1,875,910	300,501	77.1	2,697,464	1,123,219	1,209,545
Southern Railway,	6,483	17,926,620	1,837,404	21,175,231	2,767,280	3,728,970	361,674	74.0	5,515,437	2,592,178	2,496,833
Alabama Great Northern,	337	1,312,294	131,690	1,541,371	195,683	329,425	30,047	73.3	410,940	249,327	134,484
Chm., N. W. Orleans & Texas Pacific,	337	2,785,951	242,334	3,193,762	365,670	587,818	50,915	65.2	1,111,580	586,873	455,323
Georgia Southern & Florida,	397	472,881	64,140	537,021	99,592	79,362	13,755	72.1	171,670	61,324	55,999
New Orleans & Northeastern,	204	970,197	68,455	1,090,056	137,152	107,209	18,757	53.3	509,474	224,952	232,715
Southern Pacific,	8,195	28,497,565	3,828,828	34,984,111	4,345,722	6,863,357	654,470	80.6	6,787,001	3,638,898	2,227,193
Texas & New Orleans,	4,316	8,845,187	831,851	10,379,181	1,342,350	1,227,585	180,940	72.2	2,855,679	1,255,646	1,095,488
Spokane Portland & Seattle,	945	1,812,103	97,164	2,039,961	525,543	272,999	18,489	82.2	392,278	185,202	26,743
Tennessee Central,	286	319,437	7,761	352,042	58,707	72,772	9,347	98.8	32,370	—	—
Texas & Pacific,	1,854	5,262,480	522,103	6,236,556	816,205	994,364	158,872	75.9	1,505,873	580,092	531,442
Texas Mexican,	162	209,637	54	250,729	44,696	28,587	5,398	60.8	98,406	33,982	45,920
Toledo, Peoria & Western,	239	320,140	—	320,140	35,666	22,692	3,704	66.6	108,175	42,880	43,872
Union Pacific System,	9,756	28,594,804	3,859,845	35,342,452	4,435,636	6,882,916	776,648	73.3	8,725,852	5,122,059	2,587,191
Utah,	111	210,865	—	210,865	37,446	6,008	79,447	84.2	33,464	14,337	26,932
Virginian,	661	3,260,215	—	3,260,215	326,007	754,389	40,058	62.2	1,269,007	653,000	791,789
Wabash,	2,393	7,327,654	491,494	8,396,719	964,010	1,180,888	241,357	72.6	2,301,414	935,957	950,481
Western Maryland,	294	650,117	2,852	654,765	61,922	158,544	22,187	86.8	327,789	50,950	50,360
Western Pacific,	837	3,689,855	128,866	3,873,105	443,971	710,464	68,008	71.3	1,111,351	532,000	683,020
Wheeling & Lake Erie,	1,505	3,004,921	136,453	3,226,743	438,491	568,491	127,416	79.3	668,651	2,548,578	387,575
Wisconsin Central,	1,051	2,657,925	—	2,657,925	309,353	415,408	60,354	63.0	1,012,049	579,554	654,316
Wisconsin Central,	1,051	2,032,003	36,455	2,212,743	257,159	396,457	55,979	86.7	317,106	165,002	162,141

Want, smart, distinctive, long-lasting

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SEATING?



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Pantasote De Luxe Car Curtains: "Custom-made" in distinctive patterns and attractive colors—these de luxe car curtains are made from two laminated fabrics for added strength, extra long durability.

Pantasote Car Curtains—made from two laminated fabrics to prevent wrinkling and to give added strength, longer wear.

Pantasote Vestibule Curtains—for cleaner, brighter, well protected railway vestibules.

Pantasote Upholstery—Wynsote—Pantasote's new plastic upholstery—virgin vinyl coated fabric—sturdy, attractive. Especially suitable for deep spring construction.

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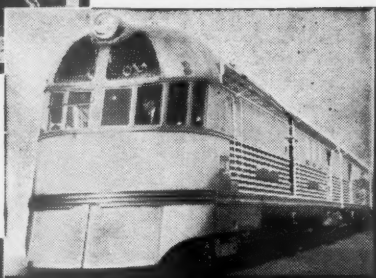
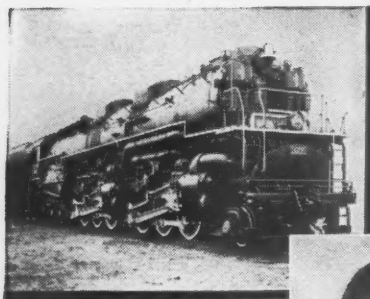
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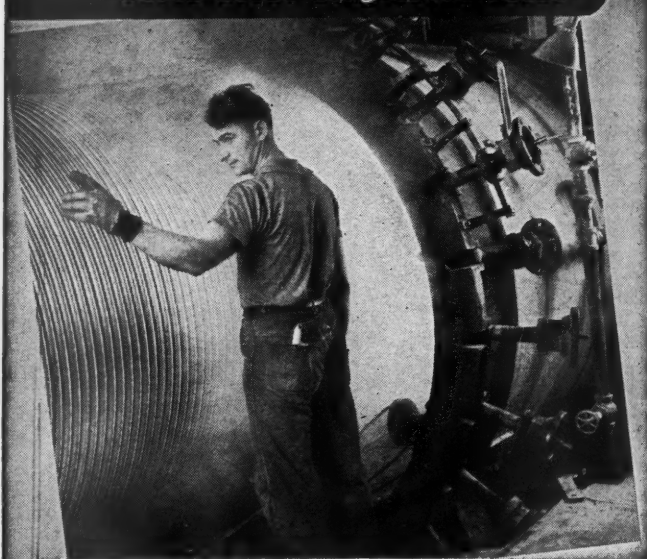
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Cars**



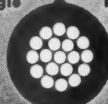
Railroad Division
EX-CELL-O CORPORATION
DETROIT 6, MICHIGAN

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single ridge



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HOUSE-CLEANING DIESELS THE NEW EASY WAY

EXIDUST PORTABLE VACUUM CLEANER

—is doing a thorough cleaning job in the Diesel shop of the Denver & Rio Grande Western.

The smaller cleaner (illustrated) picks up dust, dirt and accumulations of water and oil.

Removes dust caused by stoning of the main generator and tractor-motor commutators.

Removes solutions and residues from inaccessible places which must be scrubbed. For example, the main generator sump and the Vee between the engine cylinders.

Cleans soot out of steam generators and accumulations of dirt from dynamic braking and other resistor grids.

Has many general cleaning uses in the shop itself.

Reduce Maintenance Troubles Keep your Diesels in Better Condition

Exidust is equipped with a 20-gal. water separator which removes liquids from the air stream before air reaches the dirt collector. Produces a 6" mercury vacuum with an air volume of 280 cu.-ft. per minute. Long air hose, with different nozzle attachments, reaches most of the hard-to-get-at places. Does a quick, thorough cleaning job.

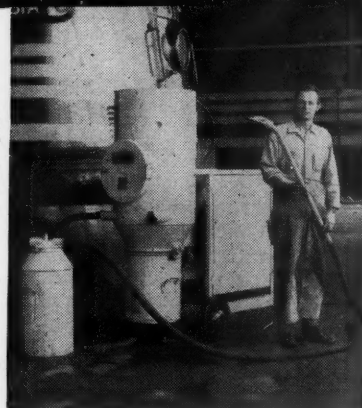
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Zero!

Orders for replacement friction parts for *Barber Stabilized Trucks* are exceedingly small—just above zero!

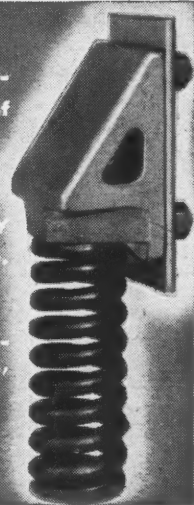
Since many of these Trucks have been in service from 7 to 10 years, the very small number of replacement orders are conclusive evidence of the long sustained life of *Barber* friction parts.

For sustained stabilizing qualities and ultimate economy, you can't beat *Barber Stabilized Trucks*.

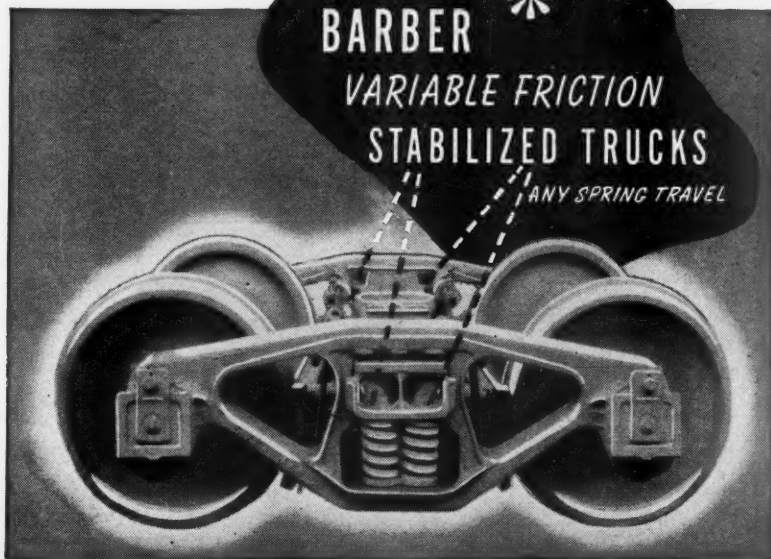
1 Special Alloy-Iron friction casting having 35 square inches of friction-bearing surface.

2 Spring-steel wear plate securely bolted or welded to the column.

3 Friction-casting-supporting side-spring having a minimum 3/4" initial compression.



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VARIABLE FRICTION
STABILIZED TRUCKS
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Over 175,000 Barber Stabilized Trucks have been ordered.

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RENOVET

spray deodorant

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Action Is Different Because
It's Made Different

By scientifically attacking offensive odors at their source, Renovet is an adequate safeguard against any objectionable odor occurring from germ-laden refuse or bacteria. It resists the growth of molds and mildew, and keeps the air fresh and stimulating in close, musty quarters.

Prevent all objectionable odors with Renovet.

Renovet Spray Deodorant actually scrubs the air with millions of vaporized droplets—washing away all unpleasant odors of stale tobacco, perspiration, refuse, coal and oil smoke. Use Renovet in waiting rooms, lavatories, baggage rooms, Pullmans and day coaches. Renovet leaves the air as cool and fresh as Spring. Safe—stainless—long-lasting—easy and economical to use—Renovet destroys smells quickly and effectively.

Renovet penetrates curtains, rugs, upholstery, every open crack and crevice—destroying all bad odors at their source. Because it is so remarkably effective, Renovet is now serving numerous railroads, airlines and institutions everywhere. Specify Renovet to bring outdoor freshness indoors.

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- 1 Fins prevent turning.
- 2 Fins seat without side pressure.
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- 6 Has reinforced hook.
- 7 Hook angle furnished to fit job.

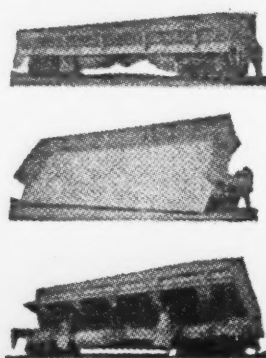
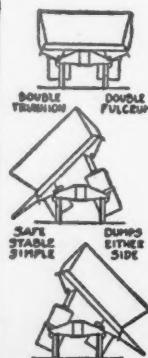


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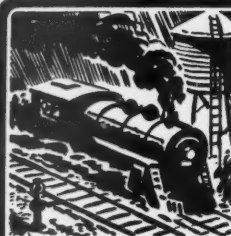


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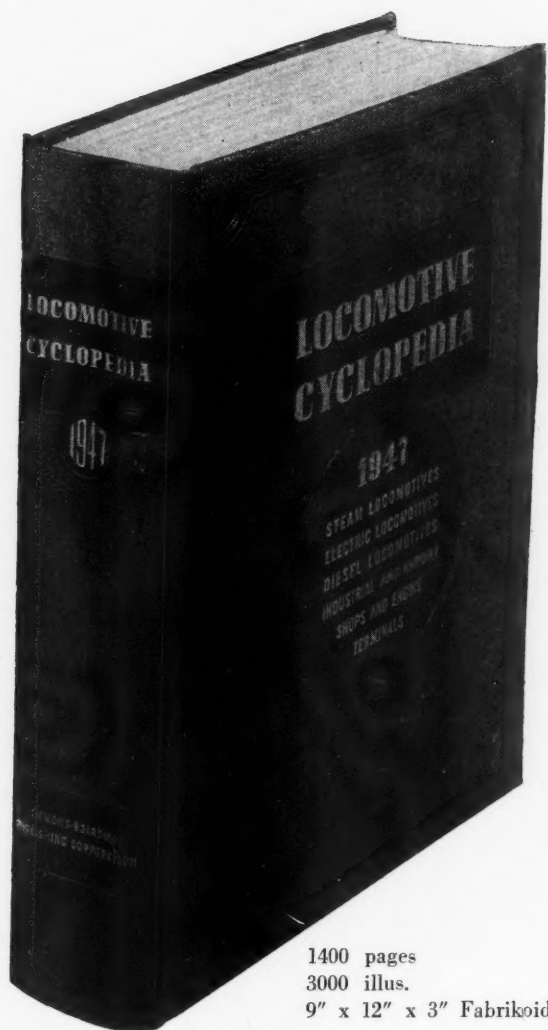
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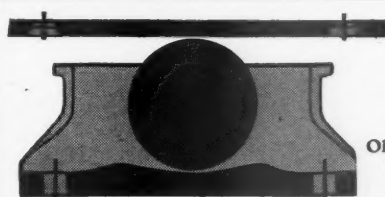
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